On a huge hill, cragged and steep, Truth stands, and he that will reach her, about must, and about must go.

John Donne
Satyr III.

INDUSTRIAL RELATIONS IN THE FUEL AND POWER INDUSTRIES

WITH PARTICULAR REFERENCE TO SELECTED UNDERTAKINGS

IN MIDLOTHIAN.

"The impression is some simple and easy solution, the assumption that industrial relations can be settled once for all by the adoption of this, that, or the other device is widespread enough to show that the intrinsic difficulty of the problem is not generally realised. So far from there being any single or simple solution, the problem is one of endless and continuous adjustment, because the relations between employers and employed are affected by every change in the conditions of industry or the ideals of the workers."

Professor Sir Henry Clay: "The Problem of Industrial Relations", 1923.

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INTRODUCTION

The aim of this survey has been to provide a description and assessment of industrial relations in three important industries; Coal, Gas and Electricity Supply. Emphasis has been placed upon individual undertakings representative of each of the three industries, in the belief that detailed studies of this kind can throw light upon the wider problems of industrial relations. The undertakings selected are the Arniston Colliery in Midlothian, and the Gas and Electricity undertakings of Edinburgh.

The survey covers the entire period of existence of each undertaking; it examines the impact of two wars, the influence of Whitleyism and of subsequent legislation, and finally, the effects of nationalisation. It is still too early to see nationalisation in the same perspective as we can view past changes in the industry and our conclusions must necessarily be more tentative, but we can attempt some cautious assessment of "gains and losses", both qualitative and quantitative, in the field of industrial relations throughout the periods under review.

The scope of industrial relations has been widely interpreted. Attention has not been confined to stoppages and disputes; these are not themselves the problem of industrial relations. They are symptoms rather than causes, and a positive contribution to the study of industrial relations must take account of all factors that can secure the co-operation of management and men in the work of production and achieve a peaceful adjustment of their respective interests. The machinery of consultation and negotiation is, of course, of extreme importance, and the chapters dealing with these topics form the central theme of this survey. But such factors as environmental working conditions, welfare amenities, security schemes, and education and training all deserve detailed examination. In my discussion of environmental working conditions I have braved the wrath of those economists who deplore the excursion of their colleagues into the field of "amateur technology", and exposed myself to the strictures of engineers and specialists who are far more qualified to write upon the subject. But in a realistic/

1. It should be noted that in the case of the Gas and Electricity Supply Industries, workers who strike are liable to prosecution for breach of contract. The Conspiracy and Protection of Property Act, 1875, 38 & 39, Vict. c.36, Section 4, placed this restriction upon persons employed in the supply of Gas and Water. The Electricity (Supply) Act, 1919, 9 & 10, Geo. V., Section 31, extended the operation of the relevant section of the 1875 Act to "persons employed by a joint electricity authority or by any authorised undertakings in like manner as it applies to persons mentioned in that section, with the substitution of references to electricity for the references to Gas or Water."

realistic study of this kind it is essential to know the background against which management and men spend their working lives. By examining the nature of the operations performed in the individual undertaking over the period of its existence it is possible to assess the easing of the physical strain of labour by the introduction of mechanisation. But the influence of mechanisation upon industrial relations at the undertaking level has extended considerably beyond the mere amelioration of the worker's toil. In the coal industry, for instance, it helped to destroy old family relationships. The practice for many years in Midlothian was for fathers to take their sons into the colliery and train them through the various stages of "quarterman" and "half-man" to be fully fledged miners.

With the growth of mechanisation, the personal skills - chiefly of sinew - which the older miners imparted were no longer so important, and the influence of workers of the "old school" became an obstacle to production rather than an advantage. The "quarterman" system has consequently been outmoded by new methods, and the emphasis is now upon schemes of education and training which will breed a generation of men capable and eager to use the new machinery. Mechanisation also served, as we shall see, as a new source of disputes; disputes over the scale and speed of operation, over breakdowns which cost the piece-workers part of their wages, over the difficulties of transporting coal which had been cut by machinery into a fine dust, over the danger of accidents which were caused - it was alleged - by certain kinds of machinery.

On the subject of wages, earnings, hours of work and holidays, the many different categories of workers involved in each industry have necessitated highly detailed treatment. These chapters, although inevitably arduous, facilitate a proper appraisal of the problems of negotiating machinery and negotiations which are considered in succeeding chapters. Throughout the periods described there have been changes in the designations of jobs, and vigilance is required in tracing the continuity. In the Gas Industry, for instance, "chargers and drawers of retorts" were later called variously "retort-house workers", "carbonising operatives" and "stokers". "Surveyors" became, in a more prosaic age, "meter-readers"; and "consumers' ledger clerks" have been submerged since 1921 in the anonymity of mere "clerks". The most spectacular metamorphosis concerned lady typists who, in the early days of the Gas Industry, were known as Female Typewriters.

The extension of residual products plants, caused largely through war conditions, brought new classes of employees into existence. Nationalisation led/
led to two very imposing new appointments in the Scottish Gas Industry, the "Principal Panel Signatory" and the "Subsidiary Panel Signatory", but closer examination has revealed them to be accountants.

There have been fewer changes in the nomenclature applied to workers in the coal and the electricity industries.

In the field of industrial relations the individual undertaking offers a convenient framework for study. It enables us, for instance, to look through a microscope at the changes in ownership over the period of the undertaking's existence. In the case of Arniston colliery these changes span a considerable period, and it is interesting to note, for example, the part played by the Dundas family who owned the land upon which the Arniston Colliery Company worked the coal. By the rights which they retained in the operation of the colliery, and by the prestige they enjoyed as local lairds, the influence of successive members of the Dundas family cut across the conventional management-worker relationships. The history of the gas and electricity undertakings is more straightforward, passing as they did from municipal to national control.

The merging of the smaller administrative unit into the larger - a process which was taking place some time before nationalisation in the coal industry, although the legal basis of private ownership remained unimpaired - will be seen to be the most significant change affecting the side of management. From the side of the workers, the objective had been from the earliest days, the protection of their interests through regional and national organisations. But the trend on both sides to large-scale organisation makes it all the more important that we study this development as it affects the individual undertaking.

Two important considerations mark the outer limits of our enquiry. First, the coal, gas and electricity supply industries - regardless of the change from private and municipal to national ownership - continue to exist for economic purposes. The decisions of the new Board members, like those of their private enterprise or municipal predecessors, must still be entrepreneurial decisions about prices, scale of operation and investment policy. These decisions remain the driving force behind management right down to the undertaking level. Second, the substitution of a public for a private employer does not make the wage-earner any less dependent upon his wages.

Although, in applied economics, division of academic labour is essential, we should not lose sight of the dangers of a sectional investigation such as this, conducted in isolation and confined to three particular industries. These industries do not exist in a vacuum; they are involved in an intricate network of economic/
economic relationships. We may discuss wage policy, for instance, from the point of view of how the parties in the labour market ought to behave; but it depends largely upon Government fiscal policy - a question which lies far beyond the scope of this survey - whether the conditions are created in which both parties are able to behave in a manner which is desirable both for themselves and for the community. Failure to control inflation, for instance, would make nonsense of any attempt to achieve responsible industrial relationships.¹ The inflationary effect of increased wages cannot be ignored, but the main responsibility for economic stabilisation lies with the Government. Furthermore, whether wage policy can be used as an instrument for increased production and efficiency will depend ultimately on the capacity of the Government to abolish acute inflationary tendencies. Too vigorous a deflationary policy, on the other hand, would be equally injurious to relations in particular industries.

These considerations must be borne in mind, particularly in the last chapter, where attention is directed to some of the general problems of industrial relations in the Fuel and Power Industries.

¹. There are good grounds for believing, as post-war Swedish writers have pointed out, that the main impetus to inflation since 1945 has been from pent-up demand left over from the war and vastly increased liquidity rather than from the effect of wage increases on costs. Wage policies, according to this view, are the instrument rather than the cause, of the wage-price spiral, and large wage rises would have taken place even if the labour market had not been organised. Thus the worst inflations after the war occurred in countries where wage formation was least free (Russia) or where trade unionism was insignificant (China).
PART I.

THE COAL INDUSTRY
CHAPTER I.

History of the Undertaking

Little did the monks of Newbattle know, as they toiled away at their open-cast mining in the thirteenth century, that they were preparing the site for the Southern Sub-Area of Number Two Area of the Scottish Division of the National Coal Board. Since that first vein of coal was worked along the banks of the Esk many prosperous collieries have developed in this area; Newbattle, Lady Victoria, Lingerwood, Easthouses, Newtongrange, and Arniston.

Arniston, to which particular attention has been devoted, was part of the lands, south of the Esk, which were granted in the twelfth century to the Knights Templar by King David I. After the suppression of the order in 1309 the lands passed to the Knights of Saint John (the Hospitallers) and were acquired during the Reformation by Lord Torphichen. He sold the estate to the Dundas family in whose possession the site of the collieries (not yet of-course developed) remained until the Coal Industry Nationalisation Act of 1946.

Sir James Dundas (son of the George Dundas who had bought the land in May, 1571) utilised the coal on his estate, along with lime, to bring into cultivation land which had hitherto lain waste. Successive owners continued to concentrate upon farming, being content to lease the acquisition of coal to tenants. It was left to Robert Dundas (1797 - 1838), son of the famous Lord Chief Baron Dundas, to participate directly in the organisation and running of a colliery.

The decision of Robert Dundas to devote himself to the development of Arniston Colliery seems to have resulted from his sudden exclusion from the sphere of law and politics. The passing of the Reform Bill and the defeat of the Scottish Tory Party spelt disaster to the political influence of the Dundas family. Robert realised that he could no longer hope for advancement through the Scottish Bar, and he turned to his estate in search of work to occupy his leisure. He decided to purchase from the tenant of Arniston Colliery a renunciation of the lease. This tenant was an incompetent man "possessed of neither capital nor energy", and having acquired direct control of the colliery, Dundas proceeded to re-equip and expand the workings. In addition to improved roads, new ventilation was installed.

It would hardly be fair, however, to blame the backwardness of the colliery/  

colliery upon the incompetence of Dundas's predecessors. Its development depended largely on access to adjacent towns, particularly upon the Edinburgh market, and any far-reaching improvements had to wait upon improved transport facilities. Hitherto coal could be conveyed only by road. In the seventeenth century regular "caryaris of coillis" would buy fuel at the pits and transport it in carts or on the backs of pack-horses to Edinburgh and other Lothian towns. It was during this century that water borne coal from across the Forth was being diverted to foreign markets, and Edinburgh was relying increasingly from the new Lothians land-sale pits. "For every vessel laden with coal which sailed into the harbour of Leith, there must have been hundreds of pack-horses and carts driven along the winding, muddy paths converging from the East and South East upon the capital."1

Robert Dundas realised the importance of the Edinburgh market, and he joined with the Marquis of Lothian, Sir James Suttie, and other colliery owners in the work of constructing a horse railway from East and Midlothian collieries to Edinburgh, and ultimately to the Leith docks.

A horse railway was constructed linking Edinburgh to Dalhousie; from Dalhousie the line was extended to his colliery at Bryans. Mr. Dundas secured permission from the Marquis to extend the Newbattle branch as far as Arniston, thereby gaining direct access to the capital. The Lothians colliery owners had suggested lines from both the North and South of Edinburgh, and they were, in fact, constructed. One line was linked with the South of the city at St. Leonard's, and the second with the north, near Abbey Hill, with a branch line into East Lothian.

In the first half of the nineteenth century much of the coal from the pits near Arniston had been sold in Galashiels, Selkirk and Peebles.2 Arniston coal provided the exception; it was "much sought by the inhabitants of Edinburgh" and was "little inferior to the famed caking coals of the English counties."

The construction of railways, particularly of the North British Railway Company system which acquired the Midlothian branches in 1845 and replaced the horses by locomotives, set the scene for further investment and expansion.

The Arniston Colliery was leased for a time to a Mr. John Christie, Coal-master, and Mr. Thomas Coats, Thread Manufacturer of Paisley, but in March, 1874, came the formation of the Arniston Coal Company Limited.

It was established under the Company Acts of 1862 and 1867 to "carry on the/
the business of Mining in Scotland, and of trading in Minerals; to acquire by purchase, by lease, or otherwise, and to work Seams of Coal, Shale, Fireclay, Limestone, and other Minerals, and to dispose thereof; to manufacture products from such Minerals, and to dispose thereof; to purchase or acquire Arniston Colliery, Clayfield, and Brickwork, Mining and other Plant thereof."

There were seven directors, representing a wide range of occupations. Three directors, Mr. John Cowan, Mr. Charles Cowan, and Mr. Hugh Somerville, were paper-makers; the other directors were Mr. James Haldane, Chartered Accountant, of Edinburgh; Mr. David Dove, Solicitor, of Edinburgh; Mr. Andrew Edward M' Rae, Physician and Surgeon, of Penicuik, and Mr. James Waldie, Coal Merchant, of Bonnington. The original capital of the company was £65,000, divided into six thousand five hundred shares of ten pounds each. The development and growth of the company can be traced in the increased issues of share capital; in November 1877 an additional £25,000 was issued, and a further £25,000 in March 1902. In April 1926 the share capital of the company was increased from £115,000 to £187,500 by the creation of 72,500 new ordinary shares of the nominal value of £1 each. The capital of the company remained at that level until nationalisation.

Shortly after the formation of the company, a new pit (called the "Gore Pit" to distinguish it from the older one which was named "Emily Pit") was sunk and fitted in 1880. These two pits, which are still worked, are about two miles distant, but come under one management.

The original lease signed between Robert Dundas (who re-acquired the colliery from Messrs. Christie and Coats) and the newly formed Arniston Coal Company is an interesting example of the extensive powers retained by landowners and royalty owners. The lease gave the Dundases of Arniston elaborate rights of inspection and consultation, and specified in detail the way in which the company was to conduct its affairs.

The lease provided that "the said Robert Dundas ... hereby lets to the Arniston Coal Company Limited ... all and whole, the coal, limestone, fireclay and common clay ... in the said first party's estate of Arniston ... with the whole pits, machinery, and appurtenances, and the large and small pumping wheels and relative apparatus for raising water from the Esk for colliery and domestic use, with the private railways and tramways thereon, manager's house, garden, and ground, attached thereto, colliers' houses and gardens, and all other buildings, erections, and appliances on the ground, used in connection with the said brickwork/

1. Lease between Robert Dundas, Esq., of Arniston, with the consent of Captain Robert Dundas, Yr., of Arniston, and the Arniston Coal Coy., Ltd., 1897. (now in the possession of Messrs. Dundas & Wilson, C.S., St. Andrews Square, Edinburgh.)
work ... the pits to be sunk by the second party (i.e., the Company) shall be on sites approved of by the first party (Robert Dundas) and so as not to interfere with the amenity of the estate ... and the chimney of any engine erected south and west of the Gore water shall not be less than eighty feet in height and be of a neat appearance, and every new engine furnace hereafter erected shall be fitted with the most approved apparatus for consuming the smoke, as the same shall be specified by the first party or his engineer ... The second party shall be bound ... to observe all necessary precautions ... so as not to create a nuisance to the first party or his other tenants, and failing their doing so, the first party shall be entitled to apply by summary complaint to the sheriff of the county for redress." Robert Dundas also stipulated that there were to be no workings within 500 yards of Arniston House, or nearer than 115 yards of any other dwelling house or farm-stead, without the special consent in writing of the first party, the company being liable for any damage which might ensue. The Company was to be responsible for keeping in good repair "the manager's house, garden and ground attached thereto, colliers' houses and gardens, mechanics shop, engine-houses and other buildings ... and it is hereby provided, that should any additional house accommodation be required for the efficient working and development of the mineral field hereby let, the said second party shall erect the same at their own expense on sites to be approved of by the first party, who, at the expiry of this lease, shall have the option of taking the houses so erected at a valuation, or of requiring the second party to remove the materials and restore the lands occupied by them." Furthermore, "the first party shall, during the continuation of this lease, have full power, by such person or persons as he shall think fit, at all times, on giving a day's notice in writing to the manager of the colliery for the time being, to enter into, inspect, and examine the whole workings and operations of the second party both above and below ground, and to take measurements and make plans thereof for his own use."

The financial provisions of the lease bound the Arniston Coal Company Limited to pay "to the said Robert Dundas, and his heirs and successors, proprietors of the minerals hereby let ... the sum of one thousand two hundred pounds sterling of fixed yearly rent ... whether the said second party shall work the minerals or not." The first party had, however, the option of declaring in writing, within one month after the end of each year, whether he would prefer to take royalties at the rate of one-ninth of the price of parrot coal, common coal, dross and lime, with a deduction of 1½d per ton "to cover/
cover commissions, bad debts, and all other charges in connection therewith, except the cost of any railway carriage the second party may require to pay, and which may be included in the price obtained for the coal."

No royalties were paid on common coal and dross used for "raising steam necessary for the working of the minerals", or in the ventilation of the workings. Also exempt was the coal used by managers and clerks and others engaged in the colliery, or in the miners' houses, and all gas coal used in making gas for lighting the pit-heads, engine-houses, and other buildings (both works and houses). Coal supplied to workmen was not, however, to exceed one-fiftieth of the total output, while the allowance of gas coal was not to exceed 200 tons annually.

When the lease was renewed in 1919, with minor amendments, royalties were fixed at sevenpence a ton, so long as the average price ("delivered into cart or put upon the public rail") did not exceed 12/- per ton. Thereafter, royalties were payable at the additional rate of one-twelfth part of the excess, up to but not exceeding a total payment of 1/3d per ton. A clause was inserted in the lease, however, declaring that in calculating the average price, no deductions should be made in respect of the cost of washing, treating, selling or handling the coal or dross in any way, in the cost of haulage from the pit to the railway sidings (i.e., public sidings) or in respect of commissions or bad debts. There was a further renewal of the lease (to last until 1975) in April 1935.

The financial provisions of the lease were affected by the Coal Act of 1938. This act "to acquire property in worked and unworked coal" abolished the old Coal Reorganisation Committee and transferred its functions to the Coal Commission. The act had been inspired by criticism that private ownership of coal on the basis of surface ownership had meant that the planning of mines was continually influenced by surface boundaries and surface rights which had no relevance to the proper development of the coalfield underground. Furthermore, most leases had been acquired at a time of prosperity in the industry, and the failure of colliery companies to see that prosperity might not last for ever, taken together with the superior bargaining power of royalty owners, had led to the signing of leases which proved onerous to lessees. Particularly onerous was the introduction of a minimum rent clause, to be paid whether the coal were worked or not. It was felt that the substitution of the State for all existing landlords would ensure control of development by the government of all the coal resources of the country,
providing merely that the Government exercised the normal powers of a landlord in granting leases. It would be even better for the industry, it was argued, if the functions of the Coal Commission embraced not only the administration of royalties but also some of the former functions of the Coal Reorganisation Committee (appropriately re-adjusted) concerned with advancing amalgamations in the industry.

Of these two functions covered by the 1938 Act it was only the former which was in fact introduced. The new provisions relating to compulsory amalgamations scarcely had time to receive more than general consideration before they were suspended in consequence of the outbreak of war. The first, the transfer of coal to public ownership, came into operation on July 1st 1942. On this date the coal became vested in the Coal Commission, and compensation amounting to £66,450,000 was paid to former owners. The Commission was not allowed to engage in mining operations, but they were required to exercise their functions, as landlords of the coal, so as to promote the interests, efficiency and better organisation of the coal industry.

The effects of this Act upon a company like the Arniston Coal Company were consequently limited in scope. It meant little more than the fact that royalties were now payable to the Coal Commission instead of the Trustees of Robert Dundas. The Coal Commission did, however, upon the request of the Company sanction a revision of the royalty rates agreed upon in the 1935 lease revision. Henceforth instead of the sliding scale already described, the Coal Commission would charge a flat royalty rate of 8.0283d with effect from 30th September 1944.\(^1\) This concession was of very short duration. In January 1947 ownership of the coal passed from the Coal Commission to the National Coal Board, along with other assets.

More practical in its effects upon individual collieries like Arniston was the decision by the Government in 1942 to put the industry under the operational control of the Ministry of Fuel and Power. This control was exercised through a Controller General in London, and eight Regional Controllers (including one in Glasgow \(^2\)) who were responsible for the policy and general conduct of mining operations. They supervised the collieries closely enough to be able to issue directions to the companies on the measures to be taken to increase output, including concentration of labour and machines. They were also concerned with recruitment and wastage of manpower, absenteeism and joint/

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2. The first Regional Controller for Scotland (appointed in August 1942) was Lord Traprain.
joint consultation. Parallel to the Controllers, boards were set up; a National Coal Board (not the nationalised industry National Coal Board) and Regional Boards. Every colliery undertaking was required to nominate a single person to be responsible for receiving and carrying out directions given to him on behalf of the Controller-General. Examples of such directions will be given in subsequent chapters.

One further development in the history of Arniston Colliery remains to be mentioned. This was the decision to participate in the centralised selling of coal. Co-operative selling in the industry had been considered by the Departmental Committee (the Lewis Committee) of 1926, which had reported that "the development of organised marketing in the coal-mining industry is desirable in order to avoid excessive competition, to effect economies and improvements in the marketing of coal, and to help to stabilise the industry." It recommended early development on a voluntary basis of local arrangements for organised marketing, and advocated the use of selling pools. The Coal Mines Act of 1930 made temporary provision for a statutory system of production "quotas" for individual mines, and for a statutory system of minimum prices to prevent excessive competition. In the case of Scotland, however, the minimum price was fixed so low (to avoid the penalisation of unfavourably situated collieries) as to be of little significance as a monopolistic measure. Part II of the 1930 Act (providing for amalgamations) was both unpopular and unsuccessful. The Coal Mines Reorganisation Commission failed to persuade the Lothians mineowners to accept their scheme. From the price regulation arrangements of Part I of the Act there did, however, emerge a series of central selling schemes. A further impetus was given to the 1930 Act by the 1935 wages dispute that, in order to put the industry on a proper financial basis, the coal owners should establish in each coal mining district complete and effective control of the sale of coal. The Government stipulated that schemes should (a) cover all coal owners in each district and have a measure of permanency; (b) effectively prevent inter-colliery competition; and (c) be so drawn that evasions could not take place.

The sales committee for the Lothians area was set up in 1935. It was a voluntary federation scheme set up to avoid the imposition of a scheme by the Coal Mines Reorganisation Committee and was a non-profit making concern. The Associated Lothians Coalowners Limited, as this sales committee was called, consisted of the Arniston Coal Company Limited, the Shotts Iron Company, the Lothian/
Lothian Coal Company, Edinburgh Collieries Limited, Gilmerton Coal Company, A.G. Moore and Co. (who had only one colliery, Dalkeith, in this area, the remainder being in the Glasgow area) the Niddrie and Benhar Coal Company, and the Ormiston Coal Company. The collieries of the first three collieries mentioned were later to form the Southern Sub-Area of the Lothians Area (National Coal Board) while the remainder became the Northern Sub-Area.

Although coal continued to be loaded at the Arniston Colliery, all sales and accounts passed through the Associated Lothians Coalowners Limited. The General Manager of Arniston, together with the General Managers of all the companies, formed the Associated Lothians Coalowners Limited board, and they would meet every month to discuss such topics as price, quantity and destination of the coal sold. A third of all Fife and Lothians coal was exported, chiefly to Western Europe. Germany and France were the most important markets, and although trade fell off (due to restrictions imposed upon imports) shortly before the formation of the Associated Lothians Coalowners Limited, this decline was fully compensated by an increase in trade to the Scandinavian countries.

It will thus be seen that Arniston was already, in 1935, forming part of a larger group for selling purposes. The Associated Lothians Coalowners Limited was unwittingly the prototype of an important section of the future National Coal Board. In 1946 almost the entire staff of the Associated Lothians Coalowners Limited became the Marketing Department of Lothian Area (No.2) HQ. Those few members not absorbed by the Marketing Department joined the Finance Department of Area HQ. At the Sub-Area level (e.g., Southern Sub-Area which includes Arniston) there is little done in the way of marketing. Clerks (doing work analogous to clerks who formerly worked at individual collieries) merely act as channels between the collieries and the Area Marketing Department. One National Coal Board official (an ex-employee of the Associated Lothians Coalowners Limited) informed me that there was almost no difference in the nature and scope of the work done now in the Area Marketing Department from that performed in the old Associated Lothians Coalowners Limited.

On the production side, and in the day-to-day running of the collieries, the Arniston Coal Company remained completely independent until 1942. It was indeed a feature of the Lothians that there were no outstandingly large producers like, for instance, the Fife Coal Company which controlled about 40% of the output in Fife, or Bairds and Dalmellington which controlled most of the production in Ayrshire.
It will have emerged from this survey that the employees at Anirston Colliery owed allegiance to two masters. Directly, of course, they were employed by the Arniston Coal Company and were answerable to its manager, for many years Mr. Thomas Lithgow, and later Mr. Peter Milligan. But considerable influence was exercised in the affairs of the workers by the Dundas family who were the local "lairds". This influence did not stem only from the provisions of the lease (which, as we have seen, granted the Dundas family considerable powers) but was also attributable to the paternalism of the various baronets and their ladies in most aspects of the social life of the Arniston community. In this respect Arniston village, notwithstanding its industrial nature, preserved some of the features of a rural community. The role of "laird" seems to have been filled meticulously by successive baronets: Sir Robert Dundas (who received his title in 1898), Sir Robert the Second, Sir Henry, and Sir Philip (who died in 1952). Nor, in fact, was the Company itself entirely removed from the Dundas family's influence. The Chairman at the time of nationalisation was Mr. Robert Nevill Dundas, W.S., of the firm of Dundas and Wilson, C.S., of Edinburgh, a relative of the Arniston branch of the family. After 1942, however, we have seen that a third prong was added to the supervisory fork, in the shape of the Ministry of Fuel and Power's Regional Controller for Scotland.

At midnight on New Year's eve, 1946, Arniston Colliery passed under public ownership. The assets of the company, together with the service contracts of employees, were transferred, with effect from 1st January 1947, to the National Coal Board. Although the colliery manager (Mr. Milligan) remained in charge of his pits, and the miners went on working as before, the authority to whom they had formerly looked for instructions was gone. The National Coal Board was ready with a new organisation in the coalfields to replace the old organisation. The Arniston (Emily and Gore) pits were among the forty-two which formed the new Number Two (Lothians) Area of the Scottish Division of the National Coal Board. The appointments to the Scottish Divisional Board had been announced on 12th September 1946, and the names of Area officials were announced shortly afterwards. Each department at the National Coal Board headquarters (Production, Labour Relations, Manpower and Welfare, Marketing, Finance, Science and Administration) had to be represented at lower formations, including Area Headquarters. Area officials in charge of these departments were to form an area committee. Because of the importance of coal production and of the need for reconstruction, the senior member of the Area Committee was the chief production official, who was directly in charge of all the collieries in the area. This/
This official was designated "Area General Manager" and although he was given a general responsibility to the Divisional Board for seeing that the area worked as an efficient unit, he was expected "to supply the element of leadership to enable the Area management to function." Mr. Buchanan was appointed Area Production Manager of the Lothians Area, and Mr. G.D.R. Allan was appointed Sub-Area (Southern) Production Manager. This latter official was wielding similar powers (although wider in area) to those formerly held by the Company's General Manager, Mr. J.A. Philips. Mr. Philips had resigned his office on 21st December 1946, and the Arniston Coal Company at an extraordinary general meeting on 23rd January 1947, authorised its directors to pay a "freewill testimonial" to him. The amount originally proposed was £7,500, but this was amended to £5,600. As already stated, the Colliery Manager remained at his job under the new authority. The Arniston Colliery, with its rich and varied history, was passing into anonymity in a vast new national enterprise.

This change in the ownership of the colliery has not been without repercussions in the life of the adjacent mining village. The consequent decline in the influence of the Dundas family is not important to this survey, as their association with the coal industry in this district ceased upon nationalisation. But the decline in the influence, for instance, of the colliery manager in his local community is not without relevance to a study of industrial relations.

In the days of private ownership, the colliery manager at a pit like Arniston was a leading member of the village community. He played an active part in all the social activities and galas of the village; he was, perhaps, a member of the local council or a Bailie. In times of trouble he might be approached by the men for advice or assistance; his wife would certainly be expected to hear the complaints and worries of the wives of the miners. The manager's prominent position in local affairs sprang partly from the prestige of his employer and partly from the position of economic power he wielded directly in the engagement or dismissal of men during times when alternative employment was limited, and in such matters as the allocation of colliery houses. But whatever the source of his authority, the fact remains that his social eminence was never disputed. Nationalisation has perhaps struck more deeply at this aspect of the manager's prestige than at any other. No longer is the colliery manager a man to be feared and respected in the village community. He is merely the local representative of a large London firm, subject to transfer to another branch at short notice.

short notice, or to removal higher up the long ladder of promotion. His presence as colliery manager may well be of a very transient nature. Nationalisation has not, of course, in this village been the only cause of this diminution of local prestige. The trade unions throughout the last quarter of a century have been offering rival sources of leadership to which the men could appeal, while the bitterness of the General Strike left scars which made it difficult for the men to extend complete respect to the manager even in his capacity as a local citizen. Another factor is the growth of transport facilities which have made Arniston, for instance, more of a suburb of Edinburgh than an isolated little mining community.

For all these reasons the colliery manager's sense of importance and usefulness to the community in which his colliery was situated has been steadily undermined. It is often this fact which older colliery managers have in mind when they criticise their allegedly lower status under nationalisation. Their ostensible criticisms are directed to their new place within the industrial hierarchy, but they are just as keenly conscious (although less ready to admit it) of their loss of status in the wider community of the mining village. The justice of the colliery manager's grievance is irrelevant. The fact remains that, for historical reasons deriving from former social relationships, attitudes have been inherited which perpetuate frustration among older managers in the industry, and thereby militate against industrial harmony.
Note on Personnel Organisation in the Coal Industry since Nationalisation

National Coal Board Headquarters

Originally the National Coal Board consisted of nine full-time members, each except the Chairman and Deputy-Chairman being responsible for a particular department. By an amending Act of 1949, however, five part-time members (prominent industrialists and trade unionists) were appointed, and the new Board announced in July 1951 no longer maintains the principle of "functional responsibility."

Three Board members, however, continue to concern themselves with personnel matters. These are the Deputy-Chairman whose general responsibility for administration covers establishment matters, the Board member for Labour Relations, and the Board member for Manpower and Welfare.

(1) Deputy-Chairman

The Deputy Chairman's responsibility is exercised through the Secretary's Department. This department includes two sections concerned with personnel matters.

(A) The Consultative Office: a small unit responsible for the joint consultative machinery, the head of which is at the same time Secretary of the National Consultative Council.

(B) The Establishments Branch: This branch is controlled by the Director of Establishments who is also the Deputy-Secretary to the Board. It consists of four branches:

(i) Organisation Branch: As well as being responsible for advice to the Board on office organisation, this branch deals primarily with staff complements, job analysis and classification of posts. This branch gives help in these matters to the Divisions whenever invited to do so.

(ii) Staff Policy Branch: This deals with national policy for non-industrial staff. It prepares all papers for the National Coal Board on staff policy, e.g., rates of pay and other conditions, and carries out all negotiations with the trade unions representing the non-industrial staff.

(iii) Headquarters Establishment Office: This is concerned with personnel management for staff members employed at the headquarters of the National Coal Board.

(iv) General Services Branch: This is responsible for the common services of headquarters, e.g., typing pools and telephone operators.
(2) **Board Member for Labour Relations**

This member is concerned with the Labour Relations Department which is controlled by a Director-General assisted by a Deputy Director-General. This Department consists of three branches:

(i) **Conciliation Branch**: This extremely important branch is responsible for advising on relations with all trade unions representing industrial employees, the working of the joint conciliation machinery, advice to Divisional Labour Directors and liaison with Government Departments.

(ii) **Wages and Intelligence Branch**: This branch's duty is to prepare papers on all policy questions relating to wages and conditions for the National Coal Board, to interpret the application of national agreements and to advise the Divisional Labour Directors on wages and allied matters. It is also concerned with compiling details of wages and conditions in competing industries. This knowledge is useful to the National Coal Board in its discussions, for instance, upon the attraction of new recruits to the industry.

(iii) **General Branch**: This is responsible for advising on all general questions relating to industrial employees, other than wages and conditions, especially the placing of recruits, upgrading, transfers, redundancy, subsidised travel, and representation and liaison of the Labour Relations Department on inter-departmental committees of the National Coal Board or Ministries involved.

(3) **Board Member for Manpower and Welfare**

This member is concerned with the Manpower and Welfare Department which, unlike the Labour Relations Department, has no single Director-General. It is divided into four branches dealing with Training and Recruitment, Education, Welfare Service and Medical matters.

Until 1950 different directors were responsible for training and education respectively. It was thought at that time that training was best linked to recruitment policy, leaving education in its broader aspects to a separate directorate. Now, however, the two subjects are under a "Controller of the Manpower Sub-Department", but they are still organised into separate branches.

(A) **Directorate of Training and Recruitment**: This is divided into:

(i) **Mechanisation Training Section**: This section is responsible for the formulation and implementation of policy for mechanisation training and for the production of training manuals and other aids. It controls the National Coal Board Mechanisation Centre in Sheffield.

(ii)
(ii) Juvenile and Preliminary Training Section: The responsibilities of this section include the training of juveniles, the limiting of wastage, and the progressive employment of young people, the formulation and implementing of policy for preliminary training and coalface training, and for designing and operating a selection procedure of juveniles for further education. This is the section which is consulted by the Ministry of Fuel and Power in the making of training regulations for adults and juveniles.

(iii) Accommodation and Manpower Section: As its title indicates, this section is responsible for assistance to divisions upon housing problems, and for reporting to the Board upon manpower trends in the pits.

(B) Directorate of Education: This is divided into:-

(i) Industrial Education under an officer whose job it is to stimulate Divisions to promote education in the problems of industry.

(ii) Headquarters Staff Education: Training of non-industrial staff, and Summer Schools.

(iii) Publications and visual aids.

(iv) Scholarships and Technical Education.

(C) Controller of Welfare Services.

(D) The Chief Medical Officer.

Divisional Level

The functions of Labour Relations and of Manpower and Welfare are combined at divisional level in the hands of the "Divisional Labour Director", who is a member of the Divisional Board. An ex-miner or an ex-trade union official holds this post in every division of the National Coal Board.

Under the Divisional Labour Director there are two Deputy Labour Directors, one of whom is in charge of labour and conciliation matters, and the other in charge of manpower and welfare. This latter official is assisted by a Medical Officer, a Divisional Education and Training Officer, a Divisional Recruitment Officer, and a Divisional Welfare Officer who, since July 1952, has been known as the Divisional Colliery Welfare Officer to distinguish his functions from those of the newly formed C

Area Level

The practice in most divisions is for the Area General Manager to employ two staff officers to advise him on personnel problems. These are the Area Welfare Officer and the Area Labour Officer. In Scotland, however, the Area Labour Officer is responsible for both labour relations and welfare matters, although/
although he is assisted by sub-area and group labour officers and by such specialists as catering officers.

Scotland is in advance of other divisions, however, in the field of education and training. Whereas the practice elsewhere is for the Area Labour or Welfare Officers to supervise this work, Scotland has appointed Area Training and Education Officers. In my opinion, this policy has been fully justified, in view of the strategic importance of education and training in the industry. Obversely, Scotland's economy in not appointing a full-time welfare officer of area status has been equally wise. There is already a plethora of welfare officials, advisers, and committees without adding to their number.

Safety officers are under the jurisdiction of the production department, although their work overlaps to some extent with Labour Relations and with Manpower and Welfare.

Pit Level

Nearly all personnel functions converge upon one official at pit level. This is the Pit Training Officer who, under Ministry of Fuel and Power Regulations, must be appointed to every pit employing more than a thousand persons (smaller pits have part-time officers). Although his main function is the supervision of training he is expected, in practice, to look after general welfare matters. Some National Coal Board officials hold the view that the appointment of "personnel officers" to pits, in addition to the training officers, would be an improvement. This is not my view. The work is already covered by existing officials, and any improvements must be looked for in the wider context of management-worker relationships rather than in adding a new official here and there.
CHAPTER II.

Environmental Working Conditions.

Environmental working conditions in the mining industry have always been arduous; darkness and dirt, inflammable gases, heat and dust and the dangers of subsidence have all combined to make the miner's job hazardous and unpleasant. The celebrated monks of Newbattle were more fortunate insofar as they restricted themselves to the outcroppings by the Esk, but later developments in the Lothians area made coal mining more exhausting. Tunnels were driven direct into the seams by the miners, and the poisonous gases and falling strata made the occupation extremely dangerous. Accumulation of water where the seams dipped downwards added to the difficulties of the miners, and in spite of much energy expended on baling out the water, exploitation of the seams must obviously have been restricted. The sinking of shafts down to the seams was a further step forward. Devices for raising the coal and baling out the water included the use of a winch worked by men (by which both coal and water were removed), horse-gins for coal and chain-and-bucket engines for the water, and at a later date, steam-power was introduced. Arniston was the first colliery in Scotland to introduce electricity for pumping. The most serious problem, however, was that of ventilation. One solution in the early days was the construction of a large furnace at the mouth of the shaft, with wooden pipes leading through the workings to the furnace. The furnace drew its sole supply of air from these pipes, and this led to a fresh rush of air down the shaft.

Prior to the introduction of winding machinery, coal had to be carried on the backs of workers from the coal face to the pit mouth, i.e., along the pit-bottom and up steep, wet wooden stairs or ladders. This work was carried out by women and children. Some women carried as much as four and a half hundredweights per journey. One six-year old girl, Margaret Leveston, told the Commissioners in 1842: "Been down at coal-carrying six weeks; makes ten to fourteen rakes a day; carries full 56 lbs of coal a wooden backit ... the work is na guid; it is so very sair ... I work with sister Jessie and Mother ... dinna ken the time we gang; it is gei dark ... 1. With the introduction of machinery to draw up the coal, it was necessary to drag the coal only as far as the bottom of the shaft, and the introduction of rails shortly after 1800 made work slightly easier. Coal was drawn in "hurleys" or wheeled boxes to which boys and girls were yoked by harness (called "girdle and chain").

1. Children's Employment Commission
First Report of the Commissioners;
Mines
1842 HMSO
Vol. XV. Para. 359.
The Lothians area was singled out, however, for special criticism by the 1842 Commissioners. "It is more common for children to begin work in the collieries in the East of Scotland at five and six years of age even than in any part of England ... In Scotland the employment of girls and women ... is even more extensive than in any part of England; but this practice is confined chiefly to collieries in the East of Scotland ... it is revolting to humanity to reflect upon the barbarous and cruel slavery which this degrading labour constitutes; a labour which happily has long since been abolished in England and in the greater part of Scotland, and I believe is only to be found in the Lothians, the remnant of the slavery of a degraded age ... the employment of females in the mines of this district is universally conceived to be so degrading that all other classes of operatives refuse intermarriage with the daughters of colliers who are wrought in the pits."\(^1\) The evidence given to the Commission by miners from the area around Arniston reminds us that the "clannishness" of miners was sometimes forced upon them by circumstances.

"The steady colliers," declared George Smith, collier\(^2\) of East Bryants, "would like females to be kept out of the pits; it is very injurious to the children, and equally so to the men, and few other trades associate with us on that account." Andrew Salton, aged 39, and Henry Naysmith, aged 65, coal hewers of Lasswade, added their voices to this lament. "Miners require comforts ... as well as other men." "Sensible men prefer their wives at home instead of their carrying like brutes."\(^3\)

Continuing its denunciation of conditions of work in this area of Scotland, the Commissioners point out that "where the side roads do not exceed from twenty-two to twenty-eight inches in height, the working places are sometimes 100 and 200 yards distant from the main road; so that females have to crawl backwards and forwards with their small carts in seams in many cases not exceeding twenty-two to twenty-eight inches in height. The whole of these places, it appears are in a most deplorable state of ventilation ... the main principles of ventilation in many parts of Scotland are ill-understood, and as ill-practised as understood, to the great danger of the workmen."\(^4\)


\(^{2}\) Ibid. Vol. XVI. Page 444.

\(^{3}\) Ibid. Vol. XVI. Page 452.

Commissioner Robert Hugh Franks has given us a vivid picture of a Midlothian mine as he found it in 1842. He descended the shaft in a basket-tub, operated by a one-horse gin. He was disturbed by the negligence of underground workings, and of roads carelessly attended to "so that the oppression of the labour is much increased by the want of good superintendence as by the irregularity of the workpeople themselves."¹ He found ventilation carried on by means of old shafts left open "where the roofs are soft, the dripping and slushy state of the entire chamber is such that men can be said to work in it in a dry condition, and the coarse apparel the labourer requires absorbs so much of the drainage of water as to keep the workman as thoroughly saturated as if they were working continually in water."² We are indebted to Franks for many strikingly realistic passages in the 1842 report, and although his purpose was to investigate woman and child labour, one suspects that he is not averse, in his Midlothian survey, to extending his indictment to general conditions, for men as well as women and children.

By the time of the Commission's investigations, Arniston Colliery (as we saw in the previous chapter) had undergone a programme of reorganisation and re-equipment by Robert Dundas, and there is a note of pride and superiority in the evidence given by Arniston representatives to the Commissioners. It can be safely assumed, however, that prior to these improvements, Arniston had shared the deplorable working conditions of neighbouring collieries. Indeed, the Arniston mining oversman, William Hunter, speaking of previous conditions at Arniston (with commendable frankness, considering that he was still in the employment of the Dundases) stated: "Women always did the lifting or heavy part of the work, and neither they nor the children were treated like human beings, nor are they where they are employed. Females submit to work in places where no man or even lad could be got to labour in; they work in bad roads, up to their knees in water, in a posture nearly double; they are below until the last hour of pregnancy; they have swelled haunches and ankles, and are prematurely brought to the grave, or what is worse ... lingering existence."³

Alexander Maxton, the manager of the Arniston Colliery who had excluded women from this work eight months previous to his statement of evidence was emphatic in his condemnation of the practice, and justifiably self-congratulatory.

². Ibid. Vol. XVI. Page 383.
latory in the improvements thereby achieved at his pit. "The two primary evils in many Scotch collieries are: first the employment of women of any age underground and second, the taking to mines of young boys. The effects of the first are the want of comfortable homes, the females being absent all day, and a certain demoralising effect invariably produced by women subjected to labour in a manner quite unsuited to their sex. The effects of the second are the total neglect of ordinary education, and from the extreme youth of the boys (many under eight years of age) their bodies are quite unable to stand coal working without injuring in some degree their constitution. Women ought, therefore, to be entirely disused underground, and no boys ought to be permitted to go below under twelve years of age; these have been the rules in this colliery for some time past, and already the good effects are being felt; the houses of the workers are clean and comfortable, the children are well looked after by their mothers, and young women are going out to service, and the whole workpeople have a better moral aspect. Colliers prior to our regulations migrated in proportion one-fourth ... now not one-tenth."  1

It is interesting to note that over seventy years later, during the Great War, there was an outcry when the manager at the Loanhead Colliery attempted to recruit women. The miners of this century were completely horrified by the proposal.  2

Mr. Maxton's optimism in 1842 was not, however, shared by all his neighbours. Mr. Gibson, manager of the East and West Bryants mines stated that he could see no particular advantage from excluding women from the mines: "as they are used to the work, and fit for nothing else, and it might increase the price of coal 2d to 2½d a ton."  3 Mr. Maxton might well have replied that given the same technical improvements as Robert Dundas had introduced at Arniston, there was no need for any increase in price. Gibson's argument was, in fact, effectively answered by the evidence of an Arniston coal hewer; Thomas Hynd, who stated: "When Mr. Maxton first issued the order, many men and families left, but many have returned, for they find now the roads are improved and the output limited that they can earn as much money, and get better homes. Many of the females have gone to service, and prefer it; and now they know the advantage, fully approve the rules."  4

Conditions/

Conditions at Arniston were still not beyond criticism, as the evidence of Andrew Young, coal-puter, indicates. Young, who was eleven years of age (a fact hardly consistent with his manager's evidence) was occupied in pulling "slypes." These were wooden framed boxes shod with iron at the bottom, and up to five cwt. of coal was dragged by boys and girls in harness, on all-fours. Andrew's task was to "draw with the ropes and chains ... slype first to the main road and then pull to the pit bottom on the railroads; sometimes I have to slype 100 to 300 fathoms, according to the room the men work in; the wall is far away from the level row. We draw as horses do, only we have no wheels to the slypes and get much injured. Boys frequently fall under the slypes and get much injured. When we descend a brae the practice is to hang on in front, and other laddies to pull behind; but with the baskets holding 5 cwts., we are frequently overpowered."\(^1\) Another witness (aged twelve) was even more emphatic: "We are worse off than the horses."\(^2\).

Of conditions in this region, as late as the eighteen forties, there is thus little favourable to be said. "Labour in the Lothians ... is most severe ... its severity is, in many cases, increased by want of proper attention to the economy of mining operations ... those operations, as at present carried on, are extremely unwholesome and productive of diseases which have a manifest tendency to shorten life."\(^3\) Prior to the regime of Robert Dundas this description would have applied to Arniston; and even at this colliery many of the unpleasant features of coal-mining still remained. Miners worked in conditions that were dangerous and "verminious," and the air was still frequently "loaded with noxious matters."\(^4\)

The functions of various employees in the mine during this period threw light upon conditions of work, although in some cases the nomenclature has survived and is almost as applicable to 1952 conditions. The manager (sometimes called mining engineer or coal viewer) was in charge of the "whole economy of the operations above and below ground." The overseman or overseer supervised "business done at the pit mouth," acting as coal-grieve or clerk. The Mining Overseman was responsible for work at the coal-wall, arranging work below ground, looking/
looking after miners, attending to ventilation, and inspecting underground operations. Workers consisted of the following categories: "banksmen" (who unhooked tubs or baskets containing coal on rising from the pit bottom); "hewers" (or miners); "putters" (who dragged or pushed carts from the coal wall to the pit bottom). Among the women and children (not usually employed at Arniston after 1840, although their duties, where necessary, were performed thereafter by boys over 12) were "below basket women" (who hooked on tubs below; these women were usually the widows of colliers); "trappers" (young children employed to open and close air doors for ventilation); "coal bearers" (women and children employed to carry coal on their backs on unrailed roads up and down steep braes); "pumpers" (girls and boys who worked up to their waists in water at the deepest part of the mines to pump rising water to the level of the engine-pump to keep the men's rooms (i.e., working areas) dry. \(1\). One suspects that the word "dry" was something of a euphemism.

By the 'sixties, environmental working conditions had improved with technical advances. We are fortunate in having an eyewitness account of a visit to Arniston Colliery (at this time leased by the Dundas family to a Mr. Christie) made in 1868 for the "Weekly Scotsman". \(2\). The visit is described with a thoroughness characteristic of Victorian journalism.

"Before proceeding to visit the pit, we acted upon good counsel, and donned a spacious suit of pilot cloth, which, though of most uncouth cut, proved to be quite an aristocratic costume when brought into contrast with the habiliments of the dusky fellows below. Under the guidance of one of the managers, we first inspected the above ground fittings of the Emily Pit. These consist of a large engine-room, containing the winding engines. The drums of these engines on which the rope is wound, are ten feet in diameter, and fitted with a powerful brake, which ensures the greatest safety and nicety in raising and lowering cages in the shaft ... the engineman can stop the cage within an inch of any desired point; and he is able to deposit it on the pit bottom so gently, that those who occupy it are unconscious of its having come to a stop, and that, too, after it has passed through the shaft at a rate of something like twenty-five miles an hour. Close by the winding-engine room is an apartment containing the pumping engine - a ponderous piece of mechanism erected/
erected over the compartment of the shaft which contains the pumps ... Though the pumps discharge thirty-nine thousand gallons of water per hour from the bottom of the pit, they have to be kept going almost incessantly in order to keep the pit clear ... Immediately adjoining are extensive workshops for engineers, smiths, and carpenters, a large number of whom are employed in keeping the working gear of the colliery in order."

It is clear that by 1868 the range of occupations involved in coal-mining had extended considerably, and that the division of labour at Arniston was becoming almost modern in its pattern. Then follows a description of how the coal was brought out; the shaft, measuring fifteen feet by nine, was divided into three equal compartments, in which two of the cages were worked, while the pumps were enclosed in the third. The winding-gear was so adjusted that while one cage was ascending, the other was descending. The cages travelled from bottom to top of the shaft in thirty seconds when laden with coal, but much slower when carrying people.

"As we stood and watched the cages emerge alternately, slimy and dripping as if they came from the depths of some subterranean lake, our intention to descent into the dark abyss threatened to evaporate." Nevertheless, our author ventured into the cage and, inevitably, "sped downwards". At the bottom "the first objects that met our eyes were a number of men engaged in various ways about a train of 'tubs' which had just been brought forward from the workings ... The fellows were cheerful withal, and set about their work with a will - laughing, 'chaffing' and singing, in defiance of the depressing influences around them. A number of horses are employed in the pit to draw the 'tubs' on the main roads." In another seam, however, there were no horses, the drawing (or "putting") of coal being done by boys. "Progress was frequently interrupted by the passing of coal-laden hurleys, which were pushed along the rails by lads carrying lights on their forehead."

The writer goes on to describe work at the coal face, where the miners were working in a series of recesses brancing off the road. "Entering one of the recesses, technically known as a 'room', we had a closer view of the miner and his mode of working. The dimensions of the room would be about twelve feet wide by twenty long, and the height from floor to ceiling was exactly three feet. The miner, after cutting a deep niche along the lower part of the seam, commenced to cut two perpendicular slits about six feet apart. After he had reached a certain depth, the coal began to crack, and in a moment or two the mass, detached by its own weight, fell and broke up into fragments with a noise/
noise resembling the breaking of a wave on a pebbly beach. The coal in this seam is soft, and neither gunpowder nor wedges are required, as in some cases, to bring it down. The work, nevertheless, is very hard and irksome - though we were told it was mere child's play when compared with the labour of excavating the 'low seams', the depth of which is only from twenty-two to twenty-four inches. In a three-feet seam, the miner can kneel while working; but in thin seams, he has to lie at length on his side, and in some cases, water pours down on him continuously. As the coal is broken away from the face, it is shovelled aside, and committed to the care of the 'puter' who fills it into his 'tub' and wheel it along to the pit bottom. This is a very severe toll for boys, but those engaged in it were stout and healthy, and appeared to be nowise discontented with their lot."

Two systems of working coal were followed in Arninston at this time. These systems were respectively designated "stoop and room" and "longwall." The former was based upon the need to secure the maximum amount of coal with the minimum expenditure of labour, but it carried with it certain hazards. Passages, or "rooms" were driven through the coal, leaving "stoops" or pillars of coal between, of sufficient strength to support the roof. The rooms were from twelve to twenty feet wide, and the pillars or "stoops" ten to twenty yards square. The pillars were allowed to remain until the limit of the seam had been reached, when the miners turned back and worked away the pillars, using wood props to prevent the roof from falling. This was the most dangerous part of the miner's work, and required considerable exercise of skill to avoid accidents. Then, after a certain proportion of the pillars had been removed, the wood props were taken out, and the superincumbent strata was allowed to settle down. The removal of the props was, of course, a precarious task; there had to be close control over the way in which the roof was allowed to break down into the "goaf" or space from which the coal had been removed. The advantages of this system were that it was economical in labour, utilized the services of men working in small skilled groups, and was free of the rigid cycle of operations imposed by other systems.

In the "longwall" system (very popular among mining engineers at this time) the miners worked along a continuous face of the seam cutting out the coal completely, and allowing the roof to settle as they advanced, care being taken to preserve roads by throwing up parallel lines of stone and waste and using wood props occasionally. As the roof collapsed, it was blasted down in the roads, to keep them sufficiently high for the loaded tubs to pass. This method/
method was not so hazardous as it might seem. The roof did not fall at once, but subsided gradually, and if the miners advanced at a steady rate, they could calculate on being up to eighty yards in front of the place where the roof came into contact with the floor. The strata of the pit lay at an angle of some 20 degrees to the horizon, and miners worked upwards on the slope. As the workings were carried forward, narrow roads had to be kept open amid the falling rock to permit the miners to reach the coal face. Through these narrow roads the coal had to be brought by the "putter" to the main roads. He had to fill the coal into a box mounted like a sledge on iron-shod slides, and as the slope of the road was more than sufficient to cause the sledge to descend of its own accord, he had to seize it by the front, and walking backwards, guide it through the tunnel, and prevent it from travelling too rapidly. After transferring the coal to a hurley, he had to drag the sledge up to the "face" again. The absence of rails in these narrow roads must have meant considerable toil and danger for the "putters", especially as they frequently had to travel on all fours along the floors of passages covered with thick layers of coal dust.

Ventilation at Arniston at this time was still achieved by an air furnace. This was a brick structure, communicating with a shaft extending to the surface of the earth. The large fire which was kept burning in the furnace caused a strong rush of air from the workings. Air entering by the working shaft had to traverse every part of the mine in order to reach the furnace, and in this way the atmosphere was kept fairly pure. An inspection was made by the "viewer" every morning before the miners entered the pit at 5 o'clock. This was to ensure that the ventilation was adequate. After the miners had finished, at 2 p.m., the "reddsmen" and "brushers" entered the pit to examine and repair the roads, remove fallen stones, and ascertain the safety of the roof throughout the workings.

Working conditions between 1842 and 1868 had obviously improved with the introduction of machinery. Government legislation had also contributed to the improvements. The Mines and Collieries Act of 1843 had made it illegal to intrust the winding machinery to any person under fifteen years of age. In 1855 it was laid down that at all collieries there must be established certain general rules to be observed by the owner and agent, and also special rules for the conduct and guidance of the person acting in the management of such colliery, and of all persons employed in and about the same. An Act of 1872 instituted Examination Boards for managers, and laid down that a colliery must be/
be under the daily supervision and control of a manager holding a certificate of competency granted by the Secretary of State. An Act in 1887 extended examinations to under-managers, and in 1911 the principle was extended to surveyors, firemen, examiners and deputies. Among the many safety regulations introduced, those relating to safety lamps and the use of only such explosives as were authorised by the Home Secretary (1897) were perhaps the most valuable in easing the strain and dangers of working conditions. Three guiding principles had thus already emerged in coal mines legislation by the end of the nineteenth century; first, the establishment of rules and regulations likely to prevent accidents; secondly, the daily control of every colliery by a competent manager who was personally responsible for the observance of rules and regulations, and liable under penalties for the breach of them; and thirdly, the appointment of inspectors to see that the provisions of the Acts were complied with. With regard to inspection, as early as 1850, authority was given to a Secretary of State to appoint and remove inspectors of mines, with powers of entry, both underground and on the surface, and of inquiry into all matters concerning the safety of the men employed. Another Act of 1855 divided the country into twelve inspection districts, and an Act of 1872 created a new class of sub-inspectors.

The Arniston Coal Company was by no means free to work its collieries in the manner it thought fit. Quite apart from the growing volume of government legislation relating to coal mining, it was bound to observe many regulations emanating from the Dundas family who owned the site of the collieries.

The 1892 lease between Robert Dundas and the Arniston Coal Company laid down in considerable detail the system of working which the company should pursue; they "bind and obliged themselves to carry on the whole mining operations in the mineral fields hereby let in a regular, correct, and systematic manner ... to make and carry forward the diphead levels and other necessary water levels in a true water-course direction, and always to keep and maintain the same and wall-faces and roads from the pit-bottom to the going wall-faces clear and patent, and also to make and maintain proper air-courses, and to keep and leave the whole going pits, roads, water-levels, air courses, and all other workings and mines ... free, clear, properly ventilated, open and passable ... and they further bind and oblige themselves to do everything which may be necessary for carrying on the working of the minerals ... upon as extensive a scale as circumstances will admit of and require, and also to furnish/
furnish and erect the whole requisite buildings, machinery and utensils necessary for so working the said minerals, and to conduct the workings so as to take out as much of the minerals as is consistent with the existing and future interests of the mineral field; it being understood and agreed that the longwall system or other mode of complete excavation is to be adopted in all the workings of gas-coal, and also in the other seams of coal when it shall be safe and practicable, and that sufficient pillars shall always be left around the bottom of each pit." This lease went on to specify such details as how much pumping machinery should be provided.

In spite of the provisions of the lease, however, the general change of coal working methods from "stoop and Room" to "longwall" was not completed until 1908. The Arniston colliery was among the earliest to introduce coalcutters, by which the coal seam was undercut. These machines came to replace arduous physical labour by cutting the coal from the face, the coal then being blasted or broken down and loaded by hand. Coalcutters were introduced experimentally at Arniston in 1890, and put into operation fairly generally by 1900, at the same time as they were being installed in the nearby colliery of Newbattle. It is interesting to note that the rest of the country was considerably behind these two Midlothian collieries. In 1902 there were only 483 coalcutting machines in the whole of Great Britain, accounting for 1.8% of the nation's total output. By 1914 there were 3,093 machines, accounting for 9.1% of coal output. By 1950, coalcutting machinery was to account for 79.3% of total output.

Arniston was similarly in the lead with mechanical conveyors which were introduced in 1912. There were, in this year, only 268 such conveyors in Great Britain, although Newbattle Colliery had introduced a conveyor as early as 1908. It was thus no longer necessary to haul the tubs of hewn coal from the working face by human or horse labour, although horses continued to be used in the main haulage roads at Arniston until as late as 1925.

With coalcutting machinery, conveyors, and an "endless rope haulage system" (hauling tubs of coal to the shaft bottom) in place of human or animal labour, and the "longwall" system in general operation, the job of coal mining became a more routine and rather less arduous task, and the cycle of operations has remained basically very much the same over the years. The essence of the longwall/

1. Annual Reports of the Secretary for Mines.
longwall system is that instead of cutting the coal into a number of relatively
small pillars (as already described) the coal is worked along a face that
may be several hundred yards in length. As the face advances, the space from
which the coal has been removed is packed with stone so as to control sub-
sidence, and roadways are extended and supported in order to serve the working
face. Conveyor belts run parallel with the face, and by a series of "T"
junctions convey the coal to the loading point. The "endless rope haulage
system" then does its work. In the cycle of operations, the night shift
workers use the machine to undercut a section of coal the length of the working
face to a depth of about five feet into the seam. The morning shift workers
break down the coal which has been undercut, set props to prevent the roof
from collapsing where the coal has been removed, and load the coal on to the
conveyor. The weight of the undercut coal assists the process of breaking
up the coal, although explosives may also be needed. On the afternoon shift
the conveyor is dismantled and re-erected nearer to the face. Packs are built
to control the collapse of the roof and supports are removed from the line of
earlier working thus allowing the roof to subside. The night shift recommences
the cycle of operations. On the afternoon and night shifts the underground
roadways are advanced in order to keep up with the face as it advances.
About twice as many men are required on the morning shift as on each of the
other two shifts.

This brief description reveals that the "longwall system" plus
mechanisation represents a considerable improvement over the "longwall system"
which was being attempted in 1868, both in terms of output secured and the re-
duction in physical labour for the miners. On the other hand, certain dis-
advantages suggest themselves. Because factory methods of supervision cannot
be applied to mining, lower standards of work and discipline are associated
with the larger concentrations of men that the system requires. Absenteeism
and "go-slow" activities can play havoc with the rigid cycle of operations
which the longwall system involves.

On the relative cost of machinery and labour, I was informed by the
Senior Planning Officer of the Lothian Area HQ (formerly a director of the
Arniston Coal Company) that the cost of a coalcutting machine is £2,000, at a
time when the miner is earning 40/- a shift. In 1910 a coalcutting machine
would have cost Arniston £500. At that time miners earned 6/6d a shift. The
coal seams at Arniston are, however, fairly thin, and the cost of labour is
consequently greater than where thicker seams are being worked. Thin seams,
furthermore, make the introduction of complete mechanisation difficult. By complete mechanisation is meant machines which both cut and load the coal. In the United States of America special "power loading" machinery has been developed, but it has been designed for use in narrow passages between pillars in what is known as "pillar and stall" work (what used to be called in Arniston "stoop and room") - a method of mining commonly used in the United States. But British pits are much deeper than most American ones, and roof control is more difficult. The gradients underground are steeper in Britain. A British machine has been designed for loading coal under the British system (i.e., longwall). This is the "Meco-Moore" which simultaneously cuts and loads coal upon a conveyor. A machine such as this is, however, less selective than individual labour, and in consequence a good deal of dirt is produced with the coal. It also creates dust and noise in operation, and the speed and power of the machine increases the difficulty of roof control. The Meco-Moore cannot be used everywhere. The coal seam must not be badly faulted, the roof must be firm and the floor solid. The seam must be not less than three feet thick and its gradient must not be too steep.

This means that at many collieries like Arniston, although the cutting and conveying of coal by machinery are well established, coal has still to be shovelled on to the conveyor by hand. This remains a heavy and disagreeable job.

In one technical sphere Arniston still lags behind. Steel pit props have not yet been generally introduced, although they were being used in Newbattle as early as 1908.

There is also a great need for better man-riding facilities underground. The most efficient method of main-road haulage both for men and materials is by electric locomotive or diesel, but these can only be used where pits have been specially designed for them. Furthermore, locomotive haulage is only possible when underground roadways are level or nearly so. Lack of man-riding facilities means lower productive standards in the nation's pits, and inconvenience for the miners.

Since nationalisation the National Coal Board has set aside £140,000 to be spent on Arniston. Apart from minor alterations to be made to the coal preparation plant and the introduction of new electrical equipment, the main project is concerned with long-term development. Arniston is to be "reorganised for a modified form of horizon mining with concentration of coal winding at..."
at one shaft."

Let us see what this reorganisation will involve. Under the horizon mining system the main roads are driven horizontally through the strata at different levels and intersect the sloping seams of coal. When the coal is being worked some way above the main haulage road, the workings are connected with the main road by a vertical shaft - a "staple" shaft - through which the coal descends by a spiral chute; it is then loaded into mine cars and drawn to the pit bottom. As the new main haulage roads will be level they will be suitable for locomotive working, and thus the mine cars can be propelled without human agency. The difference in levels between the intake and return airways gives the advantage of ascensional ventilation (i.e., ventilation taking advantage of the normal tendency of warm air to rise) thereby effecting a considerable improvement in working conditions. The advantages of gravitational loading will be obvious. Spiral chutes reduce the need for loading coal by hand.

It must not be assumed, however, that the coal miners' conditions of work have generally improved to the level of the average factory worker. In 1952 he still works in tunnels deep under the earth, away from air and sunlight; he still works with a mountain perhaps half a mile high hung above his head, which only his skill prevents from crashing in upon him. The strata above and around the workings are never still, but always pressing slowly into the open spaces of roadways and "waste", upsetting the old system of support, twisting and warping girders and breaking timbers. Some idea of this pressure can be got from scrambling along an airway or travelling road, originally five feet or more high, where the pressure of the strata has heaved the floor up within a couple of feet off the roof arches. Continuous watch and inspection are needed to keep the long miles of roadway in safe condition.

When he is working at the face the miner must continually upset the perilous equilibrium of the strata above him. He tries to get timber under the roof as soon as possible, but getting the coal is always a risky job, because there is still a stretch of roof (the "cutter track" in a mechanised seam) left unsupported. "Falls of ground" still remain the most frequent single cause of all coal mining accidents, although the number per year has fallen considerably over the past fifty years. Then packs - walls and solid stacks of stone - must be built to take the weight of the roof where the coal has been extracted. If this is not done efficiently there will be breaks in the roof while men are working, and inflammable gas may accumulate in the empty "wastes". Year by year in those seams which are becoming thinner the miner has to spend more and more/

1. See Appendix 1(a) Page 647.
more of his working day in a crouching position. He has to lie for hours on his back or side, using a pick and shovel in a space perhaps two feet high from floor to roof. When one is so doubled up, severe cramp and stiffness become a regular part of the day's work. There are some mines which are wet and cold with water continually oozing from the roof. The danger of gas and of spontaneous "heating", causing fires in the seam is often a serious one.

The miner remains acutely conscious of the discomfort and danger of his task, although the older miners are very ready to admit the improvements which have taken place during their lifetime. Although the number of fatal accidents in pits has declined fairly steadily over the years, the miner is never much impressed by statistics. He feels his job to be dangerous, and this aspect is continually stressed when putting forward wage demands. The dangers of the job are further underlined by the violent shock to public opinion of a major colliery disaster. In 1947, for instance, 104 men lost their lives at the Whit-haven "William" pit; in 1951, 80 were killed at Creswell Colliery, Derbyshire. 1950 was also the year of the Knockshinnoch Castle pit disaster in Scotland, where 13 men were killed. The death role in this Scottish disaster might well have been considerably higher, but for the fact that many miners in this pit were able to secure lightweight breathing apparatus - some of it borrowed from the fire services. 116 men, wearing this apparatus, were led to safety through several hundred yards of unbreathable air. The Ministry of Fuel and Power woke up to the urgent need for lightweight apparatus of this kind which could be used by untrained men, and two new models were introduced into the coal fields in 1951.

Although emphasis has been placed upon improvements in working conditions achieved through mechanisation, there is another aspect of mechanisation which has been viewed with suspicion by the miners. This relates to its effect upon accidents. There was considerable controversy before the war as to whether mechanical mining was more dangerous than hand methods. The trade unions tended to argue that mechanisation was dangerous insofar as it was impelled by the desire for quick profits, and they cited the cases of mechanised districts like Nottinghamshire and South Yorkshire where the accident rates were higher than elsewhere. The unions asserted that the introduction of machinery imposed a growing strain and danger upon the worker. Apart from accidents due to contact with the machines themselves, similar to those which happen in a factory, the/
the loud noise made by machines meant that it was harder for the worker to
detect the faint creaking which warned of an impending fall of the roof or side. The use of electricity brought with it new dangers, and several major disasters were traced to this cause. Mechanisation also involved the necessity of main-
taining a cycle of operations. Delay in one operation affected all the others. This meant that there was a tendency to hurry and bustle, and the in-
tcreased pace meant that miners often had to take unjustifiable risks. The Royal Commission on Safety in the Mines noted that there was a tendency for management to over-estimate the safe production-capacity of the new methods, so that to begin with too much was attempted in the time available. They also added that mechanisation involved a larger part of the twenty-four hours being occupied with the direct getting of coal, leaving less time for building roof supports and repairing roadways.

The consequence of mechanisation in the years immediately preceding the war, was that instead of setting his own pace in a "stall" of his own, working with pick and shovel, the miner worked at a speed set by machines. This machinery was closely crammed together in a confined space, and the air was laden with coal-dust and stone-dust. Lighting at the face and on roadways was generally poor, and moving machinery had to be handled in semi-darkness. On the haulage roadways, many of them constructed before the days of mechanised haulages and full of sharp bends, turns and gradients, the tubs rushed past at a great speed, with considerable danger to life and limb.

Since nationalisation, the National Coal Board have largely succeeded in dispelling opposition to mechanisation based upon fear of accidents. The record of the Board in accident prevention has been very good. During the five years, 1947-1951, more than a dozen sets of General Regulations and Orders were made by the Minister of Fuel and Power (usually at the instigation of the National Coal Board) under the Coal Mines Act, 1911. They covered such subjects as underground ventilation, the support of roof and sides, lighting, contra-band, and the use of explosives. Unfortunately, these improvements frequently had to await tragic lessons of experience. The Creswell disaster brought home to the National Coal Board the danger from fire with rubber belt conveyors, and work was begun at the National Coal Board's Research Establishment to find a non-inflammable substitute for the rubber-coated belting. The explosion at Eppleton Colliery in 1951, due to damaged electrical equipment, led the National Coal Board to improve the general standards of maintenance and supervision of electrical equipment underground. A vigorous propaganda campaign was instituted to/

to improve safety; in 1950 and 1951 a Safety Exhibition, prepared by the Ministry of Fuel and Power and the National Coal Board toured 31 areas, and was visited by almost a quarter of a million people, mostly miners and their families. All the National Coal Board's efforts were not, however, original. The Board inherited from the former owners 35 Central Rescue Stations in the coal fields.

The miners and their representatives now seem to realise that if mechanisation is accompanied by proper safety regulations, by adequate safety equipment, by thoroughly scientific lay-out (including straighter and better-kept roadways) there can be no valid opposition to it on the grounds of danger. This is not to say that all opposition to mechanisation has now ceased, but, (as later chapters on conciliation and consultation will reveal) it has been based upon other considerations. One criticism of mechanisation falling within the scope of environmental working conditions remains to be mentioned. This is the dislike of miners for the smallness or fineness of the machine-cut coal which they have to load by shovel. Hand-wrought coal consisted of larger lumps which could more easily and speedily be loaded. Mechanisation has made more difficult those intermediate processes which in many pits have still to be performed by hand.

These various qualifications and criticisms have been cited in order to dispel an over-optimistic evaluation of miners' working conditions. The miners' task is still a hazardous and unpleasant one. But there can be no doubt that, during the period under review, significant environmental improvements have taken place, which have considerably lessened the toil and dangers of the average underground worker in the coal industry.

The description of environmental working conditions given above refers chiefly to underground workers. I have concentrated upon this aspect in view of the fact that the particular characteristics which set labour conditions in coal-mines apart from other industries apply mainly to underground workers. The operations performed on the surface of a mine are largely analogous to work in a factory. Coal has to be hoisted for instance from the shaft to the surface in cages - a task no longer entrusted to unskilled child labour but in the hands of competent engineers. Then there are tasks concerned with weighing machines, unloading machines, machines for sorting and washing coal, boiler rooms, power plants, blacksmiths' shops, and machine shops for the maintenance and repair of vehicles, tools, machinery and railway track.

Among/
Among surface workers are included winding enginemen, stokers and boilermen. These workers fall into a fairly well-defined and specialised group, and they have been considered separately in the chapter on wages, earnings and hours of work. All other workers, for the sake of convenience, have been included under the composite heading "surface workers." It would not, in my opinion, have been profitable to carry subdivision any further. To have done so would only have added to the difficulties of an already highly complicated wage structure. This group includes pit-head men, persons employed on the screens and a wide variety of other tasks.

One aspect of environmental working conditions, however, applies to surface workers as well as to underground workers. This is the layout and appearance of colliery yards and offices, which in pits like Arniston have left much to be desired. One of the pioneers of improved colliery layout was Sir Charles Reid who introduced new ideas in this direction in his capacity as General Manager of the Fife Coal Company. The views of Sir Charles upon past designers of colliery premises and of slipshod maintenance were most emphatic. "It is an unfortunate fact that the appearance of many colliery yards and offices often makes an impression of dirt and disorder which must have contributed materially to the critical attitude of the general public towards the coal industry. The outside observer may be pardoned for drawing exaggerated conclusions as to conditions within the mine when there is often so much disorder and dilapidation on the surface. Not only this; the appearance of the colliery premises can hardly fail to affect the psychology of all those employed at the mine, and there can be no hope of creating among their workers a pride in their place of employment unless managements make a serious attempt to create something of which to be proud. Where plans are being made for a new mine or for remodelling an old mine, it is desirable that the advice of an architect should be taken on the surface layout." 2

Since 1. Sir Charles Reid was a well-known figure in the Scottish coal industry before the war. He was considered by trade union officials to be a shrewd negotiator, and a similar reputation is enjoyed by his son, Dr. William Reid, the present Chairman of the Scottish Divisional Board of the National Coal Board.

At a recent conciliation meeting a trade union official called Dr. Reid "a stubborn b...." Looking in the official's direction, Dr. Reid replied: "That makes two of us." "Aye", replied the official, "I'd forgotten your father."

Since nationalisation it has been the practice to ensure as attractive a layout as possible for new mines, although the nature of mining operations must always remain the determining factor in design. A certain superficial simplicity and tidiness can be aimed at, but it is doubtful whether colliery yards and offices will ever provide an attractive environment, whatever psychological advantages may accrue thereby.

On entering a coal mine the worker became bound to labour there for the whole of his lifetime, and was subject to arbitrary corporal punishment at the hands of his master if he were guilty of idleness or indiscipline. Miners' sons could follow no occupation except that of their father, and were bound to labour in the mine to which they were attached by birth. In the event of sale or alienation of the ground upon which a colliery was situated, the right to their services passed to the purchaser. Furthermore, vagabonds and beggars were sometimes consigned by the Lords of Justiciary to spend their lives in the collieries. These men worked with collars riveted upon their necks, bearing the name of the owner to whom they had been given. Commissioner R.H. Franks was astonished to find, during his investigation in Midlothian in 1842, that this slavery had not been long abolished.

"So completely had these miners been enslaved that even the Haberdashers' Corpus Act of Scotland exempted colliers and salters from its provisions."

The Act which liberated these colliers dated, in fact, from 23rd May 1775. This was "An Act for altering, explaining and amending several Acts of Parliament of Scotland respecting colliers, coalbearers and salters." The Act stated that "Whereas many colliers, coalbearers, and salters in Scotland are in a state of slavery or bondage, bound to the collieries and salt-works, where they work for life, and are sold with the mines; ... it enacted that - "No person shall be bound to work in them in any way different from common labourers."

Other provisions of the Act laid down that henceforth it was to be lawful for the owners and lessees of collieries and salt-works to take apprentices for the legal term in Scotland, that all persons under a given age, until then employed in the mines, were to be free after a certain date; and that others of a given age were not to be free until they had instructed an apprentice.

The various qualifications included in the Act meant that servitude continued until the end of the century. It is interesting to note that it was
CHAPTER III.

Wages, Earnings, Hours of Work and Holidays

There is little accurate information under this heading for the earliest period of the Arniston Colliery. With regard to general conditions, however, we do know that at this time serfdom prevailed among Midlothian miners. On entering a coal mine the worker became bound to labour there for the whole of his lifetime, and was subject to arbitrary corporal punishment at the hands of his master if he were guilty of idleness or indiscipline. Miners' sons could follow no occupation except that of their father, and were bound to labour in the mine to which they were attached by birth. In the event of sale or alienation of the ground upon which a colliery was situated, the right to their services passed to the purchaser. Furthermore, vagabonds and beggars were sometimes consigned by the Lords of Justiciary to spend their lives in the collieries. These men worked with collars riveted upon their necks, bearing the name of the owner to whom they had been given. Commissioner R.H. Franks was astonished to find, during his investigation in Midlothian in 1842, that this slavery had not been long abolished.

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Sir Henry Dundas (the first Viscount Melville), a son of Lord Arniston, who carried through another bill in 1799 liberating those serfs who still remained in the mines. The subject of slavery among early Scottish coalminers is familiar history and it is not proposed to add to the brief survey given above. Nevertheless, by bearing in mind the grim ancestry of industrial relations among Scottish coalminers we might find an explanation in subsequent chapters for attitudes and actions which would otherwise be inexplicable.

In 1744 miners in the Midlothian area were earning 7½d a week in payment for "sixty tickets" (representing loads) at 1½d each. In addition the miners received 4d for every thirteenth load (called the "bearer's free load") bringing their weekly remuneration to 9/2d. These figures were given in a "Memorandum to the Most Honourable the Marquis of Lothian Anent His Colliars' Wages", by his manager, Thomas Begbie, but there is no reference to the number of hours involved in this assessment. At this time an oversman was earning a weekly wage of 10/-; a banksman, 6/7½d; and a bottom-man, 6/7½d.

In 1794 the work performed by miners in this area came under severe criticism from the Reverend James Brown, Minister of the Parish of Newbattle. Commenting upon the scarcity of coal, he declares: "The evil was not, as some have supposed, an effect of increasing demand. The truth is that colliars can earn in three days as much as may support them fully through the week; they become dissipated and untractable; they insist upon making their own terms; and if the abuse of that liberty which was lately extended to them could be admitted as a sufficient reason for abridging it, many restrictions might be suggested which would be useful both to the public and themselves."¹

Average weekly earnings of Midlothian miners between 1812 and 1841 were given in some detail by R.H. Franks to the 1842 Commission.² They were as follows:

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<th>Year</th>
<th>Average Weekly Earnings</th>
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2. Children's Employment Commission:
   First Report of the Commissioners;
   Mines; HMSO 1842; HMSO; Vol. XV. Para. 426.
   Vol. XV. Para. 662.
Year | Miners | Putters | Average no. of days colliers worked | Amount stopped weekly for medical attendance, Burial or Friendly Societies | Value of Free Coal weekly | House Rent and Garden weekly
--- | --- | --- | --- | --- | --- | ---
1812 | 20/- | 8/- | 5 | None | 1d | 1/- | 9d
1814 | 20/- | 8/- | 5 | " | 1d | 1/- | 9d
1822 | 25/- | 5 | 5 | " | 1d | 1/- | 9d
1823 | 25/- | 9/- | 5 | " | 1d | 1/- | 9d
1831 | 18/- | 7/- | 5 | " | 1d | 1/- | 9d
1832 | 18/- | 7/- | 5 | " | 1d | 1/- | 9d
1834 | 18/- | 7/- | 5 | " | 1d | 1/- | 9d
1836 | 16/- | 5/10 | 5 | " | 1d | 9d | 9d - 1/-
1838 | 16/- | 5/10 | 5 | 2d | 1d | 9d | 9d - 1/-
1840 | 16/- | 5/10 | 5 | 2d | 1d | 9d | 9d - 1/-
1841 | 16/- | 5/10 | 5 | 2d | 1d | 9d | 9d - 1/-

Hours of work in this area varied from eight to nine daily, although children worked up to fourteen hours, and no time was allowed for meals. The only regular holiday at this time was New Year's Day, although over in the West of Scotland there was a holiday for "Newrdy" (the Glasgow Fair). As far as Midlothian was concerned, "in the coal mines of this part of the kingdom the idea of a holiday seems never to enter into the minds of the workpeople."

The days worked weekly were not necessarily in sequence. In the Arniston area miners would work perhaps nine irregularly in a fortnight, as the spirit moved them, and the question was discussed before Commissioner Franks whether, if the collier worked every day for a shorter period, there would be fewer opportunities for "mis-spending both time and money." The general feeling was against this course, although the suggestion was made that, instead of paying the men once a week on Saturday (after which the miners were idle until they had spent everything), pay-day should be once monthly with an advance of half earnings each week.

The practice which had grown up by 1845 (and which endured for nearly a century thereafter) was for a boy to enter the pit at the age of twelve and become attached to a miner (usually his father). Before 1843 boys had entered at a much earlier age, and the "quarterman" system for these younger children had been condemned by Mr. Ross, of Loanhead Colliery, in his evidence to the Commissioners.

2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.

" XV. " 476
" XV. " 499
" XV. " 406
" " 406
Commissioners, as "forcing children into mines," 1 With older children, however, the "quarterman" system was not considered in any way reprehensible. This system meant that the miner with whom the boy worked was entitled to produce one-fourth more coal than if he worked without assistance. From the price received for the extra quantity he paid the boy (his "quarterman") who filled the coal into the tubs and conveyed it to the pit-bottom. At fourteen, the boy became a "half-man", at sixteen a "three-quarter man", and at eighteen a full miner, performing all the duties and earning the wages thereof. As a "quarter-man" the boy was receiving, by 1868, 1/- a day; as a "half-man", 2/-; and as a "three-quarter man", 3/-. These wages fluctuated, of course, according to the wages received by miners.

By 1851 the wages of Scottish miners had stood at an average of 2/6d per day, but rose to 5/- in 1854. Wages fell thereafter to 3/- in 1858, rising in the four succeeding years to 3/6d, 4/-, 4/6d and 5/6d respectively. In 1863 wages fell to 4/9d, but had risen again to 5/- by 1867. In January 1867 the president of the Miners' National Association in Scotland, Mr. M'Donald, was able to boast to his delegates that "more than half-a-million pounds in additional wages had been secured for the Scotch miners within nine months by means of combination." It was left to the "Scotsman" indignantly to point out that "the whole of this half million must have been contributed by consumers of coal throughout Scotland ... In other words, all the other classes in the country, including artisans in the towns, day labourers in rural districts, shepherds in the Highlands, and fishermen in the Hebrides, have been taxed upon a necessary of life to improve the condition of some thousands of miners. Families infinitely poorer as well as those far richer than theirs have suffered to increase their comforts, not to speak of the use of coal in every branch of manufacture and all the hands that may depend upon such manufactures." 2

Later in 1867, however, miners' wages in the Coatbridge and Lothians areas fell to 4/6d a day. From this sum, 3d a day was deducted for the maintenance of tools. This reduction led to an abortive strike in the Coatbridge area (although there was no strike in Midlothian) but wages fell still further, in March 1867 3 to 3/3d.

The/  

2. Weekly Scotsman. 12th January, 1867.  
3. " " 9th March, 1867.
The attempts of the Scots miners to resist reductions in their wages when the price of coal fell evoked further rebukes from the Scottish Press: "The run of our population know nothing, or next to nothing whatever," declared the Weekly Scotsman. "of the natural and inexorable laws by which the supply and the pay of their daily labour are regulated ... In the schools supported by public money, it is made incumbent that the young shall be fully instructed in one series or another of the most abstruse theological dogmata, though each series is in contradiction to all the rest; but not the slightest effort is made to convey even an idea of those extremely practical matters such as wages and capital, supply and demand, which rule each man's daily occupation and the most immediate as well as the largest interests of the community, and regarding which, when once made known, there is really no dispute or denial."

It is true that "the inexorable laws" did not always work against the miners. In 1872 Midlothian miners were earning an average wage of 8/-, rising to 9/- in 1873. Their average daily wages from 1888 (which was later taken as the base year by the Scottish Coal Conciliation Board) are shown, as given from time to time in the "Weekly Scotsman", in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage (4/- per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888</td>
<td>4/-</td>
</tr>
<tr>
<td>1889</td>
<td>5/6</td>
</tr>
<tr>
<td>1890</td>
<td>5/-</td>
</tr>
<tr>
<td>1900</td>
<td>8/-</td>
</tr>
<tr>
<td>1901</td>
<td>6/-</td>
</tr>
<tr>
<td>1902</td>
<td>5/6</td>
</tr>
<tr>
<td>1903</td>
<td>5/9</td>
</tr>
<tr>
<td>1904</td>
<td>5/9</td>
</tr>
<tr>
<td>1905</td>
<td>5/9</td>
</tr>
<tr>
<td>1906</td>
<td>5/9</td>
</tr>
<tr>
<td>1907</td>
<td>7/6</td>
</tr>
<tr>
<td>1908</td>
<td>6/-</td>
</tr>
<tr>
<td>1909</td>
<td>6/-</td>
</tr>
<tr>
<td>1910</td>
<td>6/-</td>
</tr>
<tr>
<td>1911</td>
<td>6/-</td>
</tr>
<tr>
<td>1912</td>
<td>6/-</td>
</tr>
<tr>
<td>1913</td>
<td>6/9 - 7/3</td>
</tr>
<tr>
<td>1914</td>
<td>7/-</td>
</tr>
</tbody>
</table>

The significance of the rate of 4/- for a day of eight hours which operated in 1888 was that this figure was taken as the "basis rate" by the Scottish Coal Conciliation Board upon its formation in 1900. The work of this Board will be examined in greater detail in a later chapter ("Negotiations and Negotiating Machinery") but it is sufficient to observe at this point that its first deliberations were concerned with the adoption of a maximum as well as a minimum wage. The minimum was fixed at 31 1/2% above the basis rate of 4/- per day of eight hours, and the maximum at 75% above the basis. These rates gave miners a minimum wage of 5/3 per day and a maximum of 7/-.  

A meeting of the Board held on July 31st 1900 agreed that "miners' and underground workers' wages shall not fall below a point 37 1/2% over the 1888 basis, nor be advanced above a point 100% over the 1888 basis for one year from 1st August next." This meant, in practice, that the upper and lower limits to the Scottish/
Scottish miners' wage rates now stood at 5/6 and 8/- per day.

An agreement of May 26th 1902 provided for a three monthly notice of termination of the Conciliation Board, and laid down the following terms:

1) That the present minimum and maximum in miners' wages, being 37 1/4% and 100% over 1888 basis rates respectively, shall remain binding on both parties on the Board, provided always that this obligation shall be terminable by either party on giving three months' notice.

2) That the net average realised value of coal at the pit bank for the time being, taken in conjunction with the state of the trade and the prospects thereof, is to be considered in fixing miners' wages between the minimum and the maximum for the time being, and that in current ordinary circumstances a rise or fall of 6 1/4% in wages on 1888 basis for each 4 1/2d per ton rise or fall in the value of coal is reasonable.

3) That the present wage shall meanwhile be taken as corresponding to a value of 1d per ton above the net average realised value of coal at the pit bank in Scotland for the three months of December, January and February last, and for any average value 2 1/4d per ton over the same, and 2 1/4d per ton under the same."

An agreement of November 8th 1904 provided that:

"The present minimum wage of 37 1/4% on the 1888 basis and the maximum of 100% on the 1888 basis shall continue under the Board. The present wage shall be taken as corresponding to any value of coal between 6/5.45d and 6/9.45d per ton.

Thereafter wages shall rise 6 1/4d whenever the value of coal rise above 6/9.45d to any extent within 4d per ton up to 7/1.45d per ton. Upon the value of coal rising above 7/1.45d to any extent within 4d per ton up to 7/5.45d per ton, wages shall advance further by 6 1/4%, and so on, rising 6 1/4% on the basis rate for each 4d per ton on coal values, subject to the maximum above provided for. Likewise in a falling market wages shall fall 6 1/4% for each 4d per ton in coal values, subject to the minimum above provided for."

This agreement was terminable at three months' notice, and was, in fact, terminated by such notice on April 11th 1907, although the relation between wages and the selling price of coal, which this agreement established, continued to be recognised by the coal owners and the miners as an essential factor in the regulation of wages. Indeed, in no district in Britain were wages and the value of coal brought into such close relationship as in Scotland.

Meanwhile/

Meanwhile, at a national level, discussions were going on which culminated in the Coal Mines Regulation Act of 1908. This act, which limited the hours worked by adult male workers to eight daily (women and children had been covered by legislation dating from 1872) distinguished between persons defined as "workers" and others.

"The expression workman means any person employed in a mine below ground, who is not an official of the mine (other than a fireman, examiner, or deputy) or a mechanic or horsekeeper or a person engaged solely in surveying or measuring."¹ Onsetters were excluded, but were placed in the same position as ordinary workers in an Act of 1919. Special conditions were laid down for firemen, examiners, deputies, pump-minders, fanmen and furnacemen.

Section I of the "Eight Hours Act" stated that "a workman shall not be below ground in a mine for the purpose of his work, and of going to and from his work, for more than eight hours during any consecutive twenty-four hours", and for not more than nine and a half hours in the case of the specified classes referred to above. The Coal Mines Act of 1919 reduced the hours of work by substitution of seven and eight for eight and nine and a half. These Acts, however, legalised the extension of the working time below ground by not more than one hour a day for a limited number of days in a year. The 1908 Act stated: "The time fixed by this Act as the time during which the workmen in a mine may be below ground for the purpose of their work and of going to and from their work may be extended as respects any mine by the owner, agent, or manager of the mines on not more than sixty days in any calendar year by not more than one hour a day, and on any day on which an extension of time is made in accordance with this section as respects any mine, the time so extended shall be substituted for the purpose of this Act as respects that mine for the time as fixed by this Act."²

The 1908 Act was particularly important for the precision which it gave to definitions of working periods. A "shift"³ was defined as "any number of workmen whose hours for beginning and terminating work are approximately the same ... No contravention of the foregoing provisions shall be deemed to take place in the case of shifts of workmen if the period between the times at which the last workman in the shift leaves the surface and the first worker in the shift returns to the surface does not exceed eight hours" (in the 1919 Act this became seven hours). The owner, agent, or manager of every mine was to specify for each shift of workmen the time at which the lowering and raising of the men was to commence and be completed, subject to the approval of the inspector that the interval/

2. Ibid.
3. Ibid.
interval between the times fixed was reasonable for the purpose. As the time occupied in raising and lowering shifts of workmen was about thirty minutes, this meant that this period was added to the prescribed period of work in the case of the average workman (i.e., the middle man up to the middle man down) to determine the time spent below ground.

In spite of paternal Government legislation and carefully devised Scottish district wage agreements, disaster was looming ahead. The 1909 depression led the Scottish coalowners, in April of that year, to intimate their intention of applying for a reduction of wages, and the matter came before the Scottish Coal Conciliation Board. The effect of the proposed reduction would have been to bring wages down from 50% above the 1888 basis (the level at which wages then stood) to 37½% above basis, the minimum recognised under the Conciliation Board. The Scottish miners, who had watched with apprehension throughout the early months of 1909 the prospect of wages touching the minimum of 5/6d, had made it clear that no reduction below 50% above basis (i.e., 6/-) would be agreed to, and the Scottish Miners' Federation had received the promise of the support of the Miners' Federation of Great Britain.

The matter was considered by the Conciliation Board, but no agreement resulted. The rules of the Board provided for settlement by a neutral chairman (provided both parties agreed) and this course was suggested by the owners. The men refused, and on June 14th 1909 the representatives of the owners gave three months' notice to terminate the Board. It was at this point that the President of the Board of Trade (Mr. Winston Churchill) intervened. He invited representatives of the Scottish Coal Owners, the Scottish Miners' Federation, and the Miners' Federation of Great Britain, to meet him on July 22nd 1909 at the Board of Trade. It was decided at this conference (which was attended by Mr. G.R. Askwith, C.B., K.C.) that a sub-committee meeting under Mr. Askwith's chairmanship (at the request of both parties) should be formed to continue consideration of the question. Ultimately, Mr. Askwith having made various suggestions which were supported and reiterated by Mr. Churchill, a provisional agreement was reached between the owners and miners. The 6/- minimum was conceded on July 30th 1909, the agreement to "remain in force until August 1st 1912, and unless six months before that date notice of termination is given by either party it shall remain in force thereafter, subject to six months' notice of termination given by either party at any time." This 6/- minimum was, however/
however, to be firmly linked to the selling-price of coal, and the further question remained: to what price was this minimum wage to be linked?

The agreement had stated that "the principle of 50% on the 1888 basis as a minimum wage is conceded, and wages shall not be reduced below this point ... the basis price for the 50% minimum and the subsequent steps shall be referred to an arbiter ... The new basis price shall not be below the recent basis price, i.e., 7/5.45d."

Lord Balfour of Burleigh, K.T., was appointed arbiter, and he announced his award on May 23rd, 1910. The basis price was fixed at the minimum, i.e., 7/5.45d, and the range of each "compartment" of values was fixed at 4d per ton. Wages moved up or down by 6 1/4% per "compartment."

The monthly ascertaining of prices1 differed from most other districts in Britain, where three monthly periods were usual. The Scottish miners disliked this arrangement (although they had agreed to it) but their main concern was to secure an adequate minimum wage. The monthly fluctuation of wages was nothing more than a minor grievance if a firm "floor" could be placed to these fluctuations. The employers chief concern was with the "basis price", and they feared that the miners' wage might be fixed at a higher point than industry could carry in time of depression. The crisis of 1909 had served to warn the Scottish coalowners of this danger. With regard to the "basis price" the miners were anxious to see that the value of coal was not fixed too high to deprive them of advances of wages as values rose. More fundamentally, they suspected the justice of a rigid automatic sliding scale and they would have preferred to exercise their power in securing movements of wages in their favour in circumstances which were excluded from consideration in the sliding scale. They also felt that the volume of trade, as well as mere price, should be taken into account as an indication of the ability of the owners to pay wages. Another factor was that coal owners were getting increasingly good prices for small coal. Whereas previously it had been almost given away, by 1910 it was fetching a much better price owing to the increasing demand for furnaces with mechanical stokers and for manufacture of patent fuel. By 1910, also, economies in working were being introduced, such as reducing the supply of pit props and limiting the frequency of haulage from the face, which, although beneficial to the owners, meant on average a reduction of earning power to the men. Under the sliding scale, the interests of Scottish coalowners, like their colleagues elsewhere, lay/

1. July 30th, 1909: Clause 2 (b) of the Agreement of this date.
lay in keeping the pit going at full capacity without much regard to price, so that by keeping up a large volume of trade he would have sufficient revenue to meet all his standing charges (and with a margin to spare) in addition to wages. The miners, on the other hand, would have preferred to work short time, thus keeping down the supply in order to keep up the market price. They saw that they would suffer little or no reduction of total earnings by working systematic short time in a depression, and any slight reduction of earnings would be more than compensated by additional leisure. Scottish miners had been especially suspicious of the sliding scale from the first. At a time when most English miners were supporting the scales, strong opposition was expressed by the famous miners' leader, Alexander MacDonald. MacDonald, who paid frequent visits to the Midlothian area to organise the miners, was an ex-miner who had worked his way through Glasgow University in the winters, spending his summers in the pit. MacDonald's objection to the sliding scale seemed to be at bottom idealogical; he claimed that it subordinated the miner's wages and living standards to dictation by colliery owners, who might manipulate prices to their own advantage. MacDonald wished to see the miners bargaining as free and equal contenders for a share in the profits of the industry, using whatever weapons were appropriate.

The Scottish Wages Agreement of July 30th 1909 was due to terminate in 1912. But by the beginning of 1912 discontent was growing over the calculation of the minimum wage. The minimum wage fixed under the Coal Conciliation Board was an average; if the miners on piece work in any coal seam in Midlothian (as in the rest of Scotland) earned an average of 6/- per day there was no ground for complaint by the local union. But the miners were beginning to demand an individual minimum. The officials of the Miners' Federation of Great Britain preferred to leave it to the different districts of Great Britain to draw up this minimum, but negotiations in Scotland - as elsewhere - made little progress, and despite Government intervention, a General Strike broke out on 29th February 1912, lasting six weeks.

The Coal Mines (Minimum Wage) Act, 1912, which was rushed through by the Government and reluctantly accepted by the miners, did not contain the figures of district minima. The Act was a mere skeleton, the fixing of a minimum wage being left to each District Board. It stated that: "It shall be an implied term of the contract for employment of a workman underground in a coal mine, that the employer shall pay to that workman wages at not less than the minimum rate settled under this Act and applicable to that workman, unless it is certified in manner provided by the district rules that the workman is a person excluded under/
under the district rules from the operation of this provision, or that the workman has forfeited the right to wages at the minimum rate by reason of his failure to comply with the conditions with respect to the regularity or efficiency of the work to be performed by workmen laid down in those rules; and any agreement for the payment of wages in so far as it is in contravention of this provision shall be void." This provision made it clear that miners were entitled to the minimum only if they complied with conditions as to regularity or efficiency of work.

The Joint District Board for the Mainland of Scotland was set up under the Act, and on June 5th 1912 it fixed a minimum rate of wages of 5/10 per day of eight hours. Since 1918 this legislation constituting District Boards has had a formal existence only, its purpose being covered by voluntary negotiation. Nevertheless, the Scottish miners' nominal minimum of 5/10 (like the minima of other districts) lingered on, although it ceased to be remembered among the stream of agreements - national and local - which were arrived at through the years which followed.

Commenting in 1915 upon the movements of wages in Scotland over the previous fifteen years, Mr. (later Sir) Adam Nimmo declared: "What has happened is this, that each new wages agreement that has been entered into has been used to increase the wage at the bottom. Wages are advanced, by means of the Board (i.e., the Scottish Conciliation Board) above the minimum wage in keeping with any increased value of coal that is obtained in the market, but as soon as a reaction in trade takes place, the workman fixes a point below wages shall not fall irrespective of value, and this point is always higher at the end of every wage agreement or every period of prosperity than it was before. The employer is practically always on the defensive, and the workman practically always on the offensive. The latter never allow the clock to be turned back. They are unwilling to admit that any change has taken place in the cost of production to operate against the employer, and they argue that they are entitled to receive the benefit of any advantage which the employer may have obtained through the introduction of mechanical and labour saving devices ... there is no inclination to concede a fair profit to the industry, i.e., a profit that will attract capital to it. On the other hand the workmen's representatives appear to accept as an absolute dictum the theory that wages ultimately rule prices, and that therefore no injury can arise by frequent demands for increased wages. If the industry were self-contained there might be some ground for this view, but with foreign competition it is a delusion."

Mr./

Mr. Nimmo then permitted himself a glimpse into the future. Examining the question as to whether nationalisation would mean increased wages, he declared: "The State Ownership of mines would not bring about the harmonious solution of questions of wages unless the State, through its executive, agreed to give the workmen the fixed minimum wage at which they aimed, irrespective of the result... But the State would be required to make the industry profitable." 1

Mr. Nimmo went on to point out that increased wages (beyond the capacity of the industry) would lead to higher prices for coal exports and general industrial exports, with grave consequences upon the nation's economy. His warning was to be echoed nearly forty years later, by the executives of State-owned coal.

In the early stages of the Great War export selling prices began to rise, reaching a peak in 1920, and resembling the great coal boom of 1872. Miners' average daily wages rose correspondingly, as shown in the following table:

<table>
<thead>
<tr>
<th>Month</th>
<th>Year</th>
<th>Rate</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1914</td>
<td>1</td>
<td>7/3</td>
<td></td>
</tr>
<tr>
<td>May 1915</td>
<td>&quot;</td>
<td>8/3</td>
<td>18%</td>
</tr>
<tr>
<td>July 1915</td>
<td>&quot;</td>
<td>8/9</td>
<td>12%</td>
</tr>
<tr>
<td>August 1915</td>
<td>&quot;</td>
<td>9/-</td>
<td>6%</td>
</tr>
<tr>
<td>November 1915</td>
<td>&quot;</td>
<td>9/3</td>
<td>6%</td>
</tr>
<tr>
<td>April 1916</td>
<td>&quot;</td>
<td>9/6</td>
<td>6%</td>
</tr>
<tr>
<td>June 1916</td>
<td>&quot;</td>
<td>10/3</td>
<td>12%</td>
</tr>
<tr>
<td>August 1916</td>
<td>&quot;</td>
<td>11/-</td>
<td>12%</td>
</tr>
<tr>
<td>October 1917</td>
<td>&quot;</td>
<td>12/6</td>
<td>War Wage</td>
</tr>
<tr>
<td>June 1918</td>
<td>&quot;</td>
<td>14/6</td>
<td></td>
</tr>
<tr>
<td>January 1918</td>
<td>&quot;</td>
<td>Sankey</td>
<td>Award</td>
</tr>
<tr>
<td>March 1920</td>
<td>&quot;</td>
<td>16/6</td>
<td>2/-</td>
</tr>
<tr>
<td>November 1920</td>
<td>&quot;</td>
<td>18/6</td>
<td>20/-</td>
</tr>
<tr>
<td>December 1920</td>
<td>&quot;</td>
<td>22/-</td>
<td>1/6</td>
</tr>
</tbody>
</table>

The percentage additions to the basic rate (which were intended to allow for the relative prosperity of districts) continued to be applied on a district basis (e.g., to collieries in Scotland) until 1916. After the declaration of war, there was a change in the determination of the percentage additions, however. These additions were no longer fixed upon a sliding scale based on the price of a representative class of coal. Conciliation Boards could now take into account such factors as changes in the cost of living, and they were guided by (but no longer bound by) such factors as prices. From 1916 to 1921 the Government controlled the industry, and wages were regulated by uniform advances and reductions, applied/

1. Mr. Adam Nimmo, M.A., in a paper read to the Royal Philosophical Society of Glasgow (Economic Science Section), 10th February 1915.
applied on a national basis.

The issue of three Interim Reports on 20th March 1919 by Sir Justice Sankey heralded a flat increase of 2/- a day to adults (and 1/- for juveniles) and a seven hour day. It was also proposed that a six-hour day should be introduced as from 13th July 1921. On the Sankey terms coming into operation, the miners' leaders asked that the rates paid to the piece workers at the coal face should be raised by from 13% to 14.2%, so that the men would earn as much for seven hours as they did for eight, and the demand was ultimately conceded. In March 1920 a request for an increase in wages to the extent of 3/- per day was made. The Government offered 2/- increase, and this was accepted. In August, another demand was put forward, and a further 2/- was granted in November. A promise of a further increase was made, if national output exceeded a specific total. The output exceeded the total fixed, and an additional 1/6d a day was granted. These, then, were the events behind the steady stream of wage increases throughout, and immediately after, the Great War.

The Government announcement that State control would finish on March 31st 1921 (after the boom had passed its peak in December 1920 and a period of depression seemed imminent) caused concern among the miners, who felt that wages would now fall, and hours of work would lengthen. Both these fears were realised. The miners accused the coalowners of precipitating decontrol, but this was denied by Sir Adam Nimmo, spokesman of the Scottish Colliery owners. Speaking at Glasgow on 14th March 1921, he stated: "It was understood that the Emergency Act" (the act by which the Government controlled the industry) "would run on until the 31st August. Apart from that, the Government gave a pledge when the Act was passing through the Houses of Parliament that the Act would not be altered in its terms without the consent of the coallowners. But in view of the stern facts that were facing the Government in the administration of the industry, they have really found it impossible to hold to that position. The result is that, quite unexpectedly by both sides of those directly interested in the industry, the Government made the announcement that they would decontrol the industry entirely on 31st March."

The decontrol of the industry and the proposal to reduce wages led to the stoppage of operations throughout Britain on April 1st 1921, and it was not until June 30th that a settlement was arrived at. The miners were forced to abandon their claim for the six-hour day. The Wages Agreement of 1921 came into force on the basis of national negotiation on wages and hours, but it made provision for division into districts, and it attempted to get back to the old sliding scale method/
method on a fairer basis. A fixed proportion of the difference between the proceeds from the sale of coal and the production costs other than labour was to be regarded as the share of labour, and the percentage rate was to be determined so as to give this share as wages during the period for which the calculation was made.

In Scotland the rates of 1888 continued to form the basis of the 1921 settlement. Clause Seven of the 1921 Agreement provided that: "The standard wages shall be the district basis rates existing on March 31st 1921, plus the district percentage payable in July 1914 ... plus in the case of piece workers, the percentage additions which were made consequent upon the reduction of eight hours to seven." Clause Eight stated: - "In no district shall wages be paid at lower rates than standard wages plus 20% thereof." The standard wage for Scots miners, therefore, was 7/- per day, plus 20% which gave a district minimum wage of 8/4d per shift. The effect of an amended agreement in July 1924 was to raise this to 9/4.00d per shift. The ratios between profits and wages (and the minimum) laid down in the 1921 Agreement, and as amended by the July 1924 Agreement, are shown below:

<table>
<thead>
<tr>
<th>1921 Agreement</th>
<th>1924 Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>Profits</td>
</tr>
<tr>
<td>Standard</td>
<td>£100: -: -</td>
</tr>
<tr>
<td>Surplus</td>
<td>83: -: -</td>
</tr>
<tr>
<td></td>
<td>£183: -: -</td>
</tr>
<tr>
<td></td>
<td>£217: -: -</td>
</tr>
</tbody>
</table>

Worked out per £100 divisible between wages and profits, the proportions were £84: 6: - £15:14: - £87: 8: 9.6 £12:11: 2.4 £100: -: - £100: -: -

Minimum Wage . . . 8:4.80 9:4.00

It is doubtful whether the underlying unsoundness of the industry's position was realised when this 1924 increase was granted. This unsoundness was concealed by prolonged strikes in the United States of America and the occupation of the Ruhr; both these events left markets open for British exporters, and contributed to the fortuitous - but short-lived - boom.

It should be noted that the 1921 and 1924 Agreements introduced two types of wage-rates; the minimum wage, which was paid whether the industry could afford it or not, and the economic wage, determined in times of prosperity by economic/
economic conditions. When wage regulation by national agreement was abandoned in 1926 and a return was made to the principle of district agreements, the system of calculating the economic wage on the basis of the ascertainment for each district and the enforced payment of minimum wages were retained.

The Samuel Commission had sought to achieve reductions in the cost of coal (to bring the industry out of its depression) by the reorganisation and concentration of the industry rather than by the manipulation of wages and hours of work, and it went so far as to justify the system of national negotiations and the standard length of the working day (7½ hours underground). But in order to permit the necessary degree of reorganisation to take place, the Commission recommended a reduction in the minimum wage rates enforced in 1924, or should the miners prefer it, an increase in working hours. After the long stoppage in 1926, one of the conditions under which work was resumed was a return to the principle of district agreements. As regards hours, the eight-hour day was in effect reintroduced by the Coal Mines Act (1926) which received Royal Assent on July 8th 1926. This was brought about by an amendment to Section 3 of the 1919 Act. The amended section now read as follows: - "The time fixed by this Act as the time during which the workmen in the mine may be below ground for the purpose of their work and of going to and from their work may be extended as respects any mine by the owner, agent or manager of the mine, by not more than one hour a day, and on any day in which an extension of time is so made in accordance with this section as respects any mine the time as so extended shall be substituted for the purposes of this Act as respects that mine for the time fixed by this Act." This section thus made it legally possible for the owner of the mine to increase hours to eight per day for persons deemed to be "workmen" and to nine for certain other specified categories (laid down in Subsection 7, paragraph (a) of Section (1) of the 1908 Act).

The district settlement in Scotland which followed the General Strike led to the revival of the District Conciliation Board to regulate wages. The miners would have preferred the system of national agreements, and quoted the Samuel Commission to support their claim: "We do not see how such a wage, in a community so small and so closely united as Great Britain, can ultimately be fixed by other than national authorities. To give a free hand to each district to settle its own standard of living without consultation and without regard to any other, is to expose the standards of the more efficient and prosperous areas, on which the future of the country rests, to undermining by the weaker areas; it opens the door to cut-throat competition between different districts at the expense/
pense of wages. We conclude accordingly that the minimum percentage for each
district should be settled, or at least approved, by agreement between bodies
representing all the employers and all the workpeople in the industry. This
does not mean that the minimum percentage for each district may not with
advantage be discussed, in the first instance by district associations, if they
think fit, provided that the minima thus provisionally agreed are afterwards
submitted for approval by some national authority." 1.

The coalowners, however, steadfastly refused to consider the question of a
national agreement, and wages were thereafter based on district negotiations.
Even the Coal Mines Act of 1930 (Part iv) failed in its attempt to secure
national agreements.

The Samuel Commission2. had found that in 1926 wages in most districts
(including Scotland) were at a minimum, and this situation continued for ten
years.

The Coal Mines Act of 1930 also made provision for the number of hours
worked per day. Under Part III the extension of one hour a day permitted under
the 1926 amendment until July 1931 was reduced to half-an-hour and it was in-
tended that, when the labour provisions of the 1926 Act finally expired in
1931, the number of hours worked should revert to the level of 1919. The 1930
Act, therefore, reduced hours once more to 7½ between windings, but the further
reduction to seven did not eventuate. It was argued by the coalowners that such
a reduction would be disastrous without a reduction in wages, and to this pro-
posal the miners, as might be expected, were firmly opposed.

District agreements were signed in Scotland on August 8th 1927, March 30th
1931, August 26th 1931 and April 13th 1934. The main change was in the August
1931 agreement which reduced the minimum percentage addition to basis rates down
from 110% to 100%. The manner with which the negotiators clung to their 1888
"basis rates" in Scotland was a striking example of "ca' canny!" That long-
forgotten 4/- daily rate still served as a basis for computation, and added to
the intricacies of an already highly-complicated system of wage fixing. The
surplus divided between wages and profits was now fixed at the ratio 85:15, and
the period covered by ascertainment was two-months. If as a result of paying
the miners the minimum percentage the Scottish coalowners received less than 15%
of the total net proceeds, the "deficiency" was carried forward from year to year,
and treated as a debt to the owners. Only one-third of any surplus was, however,
to be applied for recoupment. The 1934 Agreement was "to remain operative until
March 31st 1936 and thereafter unless terminated by one month's notice in writing by/

2. Ibid. Page 153.
by either of the parties after that, or until such date, whether before or after March 31st 1936, upon which the hours of work herein agreed to are altered by statute, which ever of such date or date of termination of notice as aforesaid shall first occur."

It should be noted that the month's notice of termination referred to is not to be confused with the two-monthly ascertainment of wages and profits.

Miners from all parts of Great Britain put forward further demands for wage increases in 1935; in addition, they demanded a return to the principle of national negotiation. This latter claim was rejected by the owners. With regard to the claim for 2/- increase per shift and 1/- for juveniles, the owners made varying offers. Most districts in England offered 1/- per shift with 6d for juveniles. In Scotland, the owners offered 9d and 4½d respectively. The terms were at first rejected by the men, but finally were accepted on January 24th after a promise had been made that a National Joint Consultative Committee would be set up.

In one important respect, however, Scottish workers were better off than their English colleagues. There was, in Scotland, less short-time working than in the South (in 1934, for instance, Scotland worked an average of 5.85 shifts per week compared with a national average of 4.86). Consequently the fixing of minimum wages by shift rather than by week did not affect Scots workers so adversely as English. This difference must be borne in mind when perusing the following table (showing annual variations in average earnings per shift throughout the period we have been considering).

### Average Earnings per shift of Coal Miners in Scotland compared with the Average Earnings for Great Britain

(Based upon Annual Reports of the Secretary for Mines)

<table>
<thead>
<tr>
<th>Year</th>
<th>SCOTLAND</th>
<th>GREAT BRITAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921 (Oct. - Dec.)</td>
<td>11/ 11d*</td>
<td>12/ 8</td>
</tr>
<tr>
<td>1922</td>
<td>9/ 7½</td>
<td>9/ 11½</td>
</tr>
<tr>
<td>1923</td>
<td>10/ 9</td>
<td>10/ 1</td>
</tr>
<tr>
<td>1924</td>
<td>10/10½</td>
<td>10/ 7½</td>
</tr>
<tr>
<td>1925</td>
<td>10/ 3½</td>
<td>10/ 6</td>
</tr>
<tr>
<td>1926 (Jan. - April)</td>
<td>10/ 4</td>
<td>10/ 5</td>
</tr>
<tr>
<td>1927</td>
<td>9/ 7½</td>
<td>10/ 0½</td>
</tr>
<tr>
<td>1928</td>
<td>9/ 3½</td>
<td>9/ 3½</td>
</tr>
<tr>
<td>1929</td>
<td>9/ 2</td>
<td>9/ 3½</td>
</tr>
<tr>
<td>1930</td>
<td>9/ 3½</td>
<td>9/ 3½</td>
</tr>
<tr>
<td>1931</td>
<td>9/ 0½</td>
<td>9/ 2½</td>
</tr>
<tr>
<td>1932</td>
<td>8/ 9½</td>
<td>9/ 2½</td>
</tr>
<tr>
<td>1933</td>
<td>8/ 9</td>
<td>9/ 1½</td>
</tr>
<tr>
<td>1934</td>
<td>8/ 9½</td>
<td>9/ 1½</td>
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<tr>
<td>1935</td>
<td>8/ 9½</td>
<td>9/ 3½</td>
</tr>
<tr>
<td>1936</td>
<td>9/ 6½</td>
<td>10/ 0½</td>
</tr>
<tr>
<td>1937</td>
<td>10/ 4</td>
<td>10/ 8</td>
</tr>
<tr>
<td>1938</td>
<td>10/10½</td>
<td>11/ 2½</td>
</tr>
</tbody>
</table>

*It/
It will be noted that earnings for the last quarter of this year have fallen catastrophically from the figure of 22/- for the beginning of the year (see page 46 above).

Certain other differences between Scotland and England with regard to wages and hours of work should be mentioned. The Scottish district agreement provided for a full shift worked on a Saturday, whereas in England the Saturday shift was defined by agreement to consist of anything from 6½ hours (Lancashire and Cheshire) to 5 hours (Leicestershire).

The hours for underground men included intervals for meals ("snaptime"), but in most English districts no time was stipulated. In Scotland, however, the district agreement laid down a maximum of fifteen minutes.

The Scottish agreement of 13th April 1934 also laid down new rules with regard to overtime and week-end work. As long ago as 1920 a national agreement had been reached on these topics (during the era when decisions were being made at this top level). It had stipulated:

1) The arrangement shall apply to all workers both underground and on the surface at the collieries in England, Scotland, and Wales.
2) All overtime worked between the commencement of the Sunday night shift and the end of the following Saturday morning shift to be paid for at the rate of time and a third.
3) All time worked from the commencement of the Saturday afternoon shift to the commencement of the Sunday night shift to be paid for at the rate of time and a half.
4) In any case where the present rates and/or conditions relating to overtime and week-end shifts are more favourable to the workers than the above they shall remain unaltered.
5) Payment under this agreement shall be made from and including the pay period during the week ending 3rd April 1920.

With the return to district agreements these provisions had not been embodied in Scottish Agreements until 1934. In that year, provision was made that all time worked (other than by piece workers) from the commencement of the Saturday afternoon shift to the commencement of the Sunday night shift should be paid for at time and a quarter, other overtime to be paid at ordinary rates. In some English districts, hewers received tonnage and a third or yardage and a third for overtime work; in other no specific reference was made to the subject. In Scotland, however, piece-workers were specifically excluded.

Mention must also be made of allowances for house, rent, coal, etc., Free houses/
houses (or at a special rental) and free coal (or at a special price) have a long history in the coal-mining industry. Allowances in kind averaged 3/4d per shift in Scotland in 1934 (they varied from 2 3/4d to 4 3/4d in English districts, with the exception of Northumberland and Durham where they were about 1 1/2d and 1 3/4d a shift respectively). These figures, however, do not allow for qualitative differences in housing conditions between different districts. This factor, as we shall see in a later chapter, was important in Midlothian, and in Arniston in particular.

September 1939 brought new and urgent problems which confronted all districts together, and which were to revive the demand for implementing the Samuel Commission recommendations for a national approach to wages and hours of work. The Government secured agreement with the coalowners to refrain from raising prices without consultation, and the effect of this stabilisation was to throw out of gear the district agreements which, as we have seen, were based upon ascertained proceeds. As in the first War, new national agreements had therefore to be concluded to cover wage advances during the war period. These advances were at first based only upon the cost-of-living index, but in May 1941 a shift increase of 1/- was given as an "attendance bonus", while at the same time the Essential Work (Coal Mining Industry) Order was applied. This Order was signed on 15th May 1941, and gave a new significance to the determination of wage rates. The scheduling of collieries was dependent on the Minister of Labour and National Service being satisfied with the terms and conditions of employment while scheduling carried with it a guaranteed minimum wage. Article 4(1)(d) to 4(4) of this Order was particularly important, as it was at a later date to be adopted by the National Coal Board as a basis for wage determination. It stated:

4. (1) without prejudice to any terms and conditions of employment more favourable to persons employed in the undertaking that may be provided for by the Conditions of Employment and National Arbitration Order, 1940, or by that Order as amended by any subsequent Order, the person carrying on the undertaking shall, in respect of every week, pay to every person employed in the undertaking (except as otherwise provided in this Order) a sum which is not less than the guaranteed working

wage for that week if that person is, during his normal working hours:

(1) capable of and available for work; and

(2)/

1. The "War Additions to Wages Agreement" of March 1940.
(2) willing to perform any services outside his usual occupation which, in the circumstances, he can reasonably be asked to perform during any period when work is not available for him in his usual occupation in the undertaking.

On June 3rd the Government published a White Paper\(^1\) on the control and organisation of the industry, and on June 5th appointed a Board of Investigation to enquire into certain wage issues and "into the present machinery and methods of determining wages and conditions of employment in the industry." With regard to the immediate wage issues, with which we are concerned in this chapter, the Board of Investigation, under Lord Greene, on June 19th 1942 recommended increases for underground work and the pegging of the percentage additions to basis rates in order to prevent diminution of those increases by any subsequent fall in the additions. It also recommended an output bonus and the adoption of an overall minimum wage of 83/- per week for adult underground workers. The immediate increase was 2/6d a shift for all workers, and the bonus for output was on a sliding scale, based on the increase of total output of a district beyond a standard figure fixed for each pit. For every 1% increase above a "standard tonnage" in a given month, the workers' earnings would be increased by 3d per week. The Coal Industry was still to require the services of statisticians!

Strong pressure for this upward movement of wages had come from Mr. Bevin, the Minister of Labour and National Service. Not only had miners been tied to the pits, but miners who had left over the previous six years were drafted back, many from better jobs in arms factories. On June 4th 1942 Mr. Bevin told the House of Commons: "In the last six months I have transferred, at a great loss of wages to themselves, over 36,000 men from munitions factories to the mines."

The Greene award went a little way to redressing the grievances of these men.

On 22nd January 1944 the recently formed National Tribunal, under Lord Porter, increased the national minimum wage for adult underground workers from 83/- to 100/- per week. The award meant large increases for men on the minimum in some areas (Durham, Northumberland, South Wales) but meant only a very small gain for Scotland. Other advances gained at the same time were payment for overtime at time rates plus one third, and for week-end work at double time (flat rate advances to be included in the rates so reckoned), and payment for a week's holiday at a rate based on weekly average earnings of all workers.

The Porter Award called for a review of the wage structure in the Industry, and this review was undertaken by the Mining Association, and the Miners' Federation/  

\(^1\) Cmd. 6364.
Federation of Great Britain in conjunction with the Ministry of Fuel and Power. The Government proposed the following main points to be incorporated in the agreement:

1) The existing ascertainment agreements to be suspended while the agreement was in force, and the percentage additions payable under them to be merged in the day-wages or piece-work prices.

2) Flat-rate additions, except the cost-of-living allowance (which in 1944 stood at 16/- weekly) to be merged in basic rates. Day wage men would receive basic rates which included the current ascertainment percentage and the district flat-rate advances. Craftsmen would receive 1/- a shift increase, and if they were below the Porter minimum they would receive the minimum plus 1/- per shift. Piece workers would receive an additional percentage on their piece-rates, arrived at by ascertaining the percentage which the flat-rates (other than cost-of-living allowance) bore to the district minimum shift rate. Thus the 21/- flat-rate additions during the war, and the 1/- shift addition won in many areas in 1936 (but only 9d in the case of Scotland) would be converted into a percentage which would then be applied to all piece-work rates. The net effect would be that the piece-workers' minimum remained unchanged, but all piece-work earnings above the minimum would be increased. This method would provide an average of 3/- a shift to piece-workers at rates of output then existing.

3) The agreement was to operate until December 1947, after which either party could give six months' notice to end it.

4) During the period of the agreement no variation was to be sought by either side in the existing national and district rates established by the arbitration and conciliation machinery, or in the wage rates at the pit (other than charges normally made in respect of changed methods and conditions of working).

5) The parties should agree to ensure observance of the agreement.

An agreement embodying these terms was signed by the owners and men's representatives on April 20th 1944. The agreement was to govern wages in the following four years, and both parties agreed not to apply for variation in the existing rates during this period. On the miners' side there was considerable apprehension that the peace would usher in an era of decontrol and an abandonment of national wage determination (on the lines of what had happened after the first War), and the four-yearly period was intended to allay their fears on this score. It was agreed that the requisite six months' notice of termination would not be given by either side before December 31st 1947.
Post-Nationalisation

The fears of the miners proved groundless, and the events of the immediate post-war period resulted in an upward rather than a downward pressure on wages. On July 12th 1946 the new Government's Coal Industry Nationalisation Bill became law, although "vesting day" was not until January 1st 1947.

While the Bill was receiving its second and third readings the miners were pressing for the immediate introduction of a five-day week, but it was hardly within the interests - or the power - of the coalowners at this stage to accede to their demand. As the Minister of Fuel and Power pointed out on June 26th 1946, referring to the proposed five-day week:

"Normally this would have been considered by the industry through the established conciliation machinery. . . .

It is clear that the present owners could not be expected to undertake the responsibility for negotiations with the union on a major issue of this kind, on which any agreement reached must have far-reaching effects on the future working of the industry for which they will bear no direct responsibility. Nor are the members designate of the National Coal Board, which has not been and cannot yet be legally constituted as such and has not yet the necessary staff, in a position to embark on such negotiations. On the other hand, in the Government's view, an early announcement on this issue is essential.

Accordingly, I take this opportunity of announcing that the Government offer no objection in principle, provided that arrangements and conditions can be established with the full co-operation of the miners, to an organised five-day week of a kind which will secure the output of coal which is necessary to meet the country's needs. It is vital to attract more recruits to the industry to secure the coal supplies, which we shall need over the next few years."

On December 5th 1946 the now-constituted National Coal Board signed an agreement with the National Union of Mineworkers (the new title of the former Miners Federation of Great Britain) which adopted the wages and conditions and provisions of the agreement of April 20th 1944. Both parties were, however, released from the four years' "period of grace" and the six monthly notice of termination, and they were left free to enter into any new agreement that might be required, for new scales of wages and a new wage structure, at any time after vesting day. The National Coal Board now undertook to pay the men for six statutory and customary holidays a year in addition to the annual holiday provided for in the award of January 1944.

The holiday arrangements did not meet the full demands of the National Union/
Union of Mineworkers as put forward in their "Miners' Charter." Not only had they demanded payment for the six statutory holidays but also an additional full week's holiday with pay. In rejecting this demand the National Coal Board were merely echoing the Government's wishes. In June 1946, Mr. Shinwell had declared: "The Government cannot support the proposal of an additional week's holiday in addition to the five-day week, which, when it becomes operative, would generally represent one day off each week."

With regard to the statutory holidays, however, pressure from the Government on the Mining Association, and later on the National Coal Board, had been applied in favour of the National Union of Mineworker's claim. As Mr. Shinwell stated: "The suggestion that payment should be made for the six statutory and customary holidays is on a different footing, provided payment for the holiday is made conditional on full attendance during the week on which it falls ... I have been in touch with the Mining Association and at my request they have agreed to enter into discussion with representatives of the National Union of Mineworkers through the established conciliation machinery of the industry with a view to agreement being reached in regard to the method and amount of such holiday payments."

A "Statutory Holidays Agreement" was finally drawn up on May 23rd 1947. No conditions were imposed, however, as to attendance qualification. All that was required in order to qualify for the holiday was for the worker's name to be on the colliery books. In other words, the statutory holidays became an unconditional right, notwithstanding Mr. Shinwell's parliamentary statement as to the safeguards in implementing it.

The "Annual Holidays Agreement" was designed to interpret the miners' right to a holiday as generously as possible. A workman who had been disabled by accident, industrial disease or sickness, who had worked one or more shifts during the twelve months immediately preceding the last pay day before the annual week's holiday was taken at the colliery, and who had not entered employment outside the coalmining industry, was to be entitled to the full amount of the holiday allowance. A workman who had retired because of age within six months of the commencement of holiday, and who had not entered employment elsewhere, was similarly entitled to the holiday allowance. Where a man had been rendered temporarily idle by the closing of pits or sections of pits, or the changing from double shifts to single shifts, and had been re-employed within the industry within twenty-six weeks, he was entitled to receive holiday pay from the colliery at which he had been formerly employed. In the case of workmen sustaining fatal accidents/
accidents, or dying from industrial diseases which had qualified for compensation, within six months from the commencement of the holiday, payment of the holiday allowance was to be made to the widow or any other dependent. Where a workman was transferred from Colliery 'A' where he had taken his holiday to Colliery 'B' where the holiday period had not been taken until after he had started work, he was to be given employment at Colliery 'B' during the holiday week at any job which he was capable of performing.

The wartime holiday award had laid down the procedure for calculating how much holiday pay the miners as a whole should get - the total amount paid in wages in the previous year (excluding holiday pay) divided by 50. As wages were increased in 1947 (see page 62) this meant an increase in holiday pay in 1948. The men in this year got £6:5:– compared with £6 in 1947, and youths and women also got increases. As the Board agreed in 1947 that the payment for each statutory holiday should be one sixth of the annual week's holiday pay, payment for statutory holidays was also increased slightly compared with 1947. In November 1948 the National Union of Mineworkers submitted their claim for a fortnight's annual holiday with pay. The National Coal Board refused to accept the claim, but in April 1949 it agreed to raise the holiday rates from £6:5:– (at which they stood in that year) to £7:10:–, and to increase pay for statutory holidays accordingly. This increase did not, however, deter the National Union of Mineworkers from pressing its claim for a second week's annual holiday. The National Coal Board replied that two weeks' holiday with pay was a desirable reform, but the industry could not afford it. The claim was referred to the National Reference Tribunal. The tribunal took into account "the present position of the country as a whole, the necessity for the industry to pay its way, and the economic effect of a rise in the price of coal." By including such wide economic issues in its findings it was able to give convincing reasons for rejecting the claim.

The miner's right to his annual holiday is interpreted, in individual cases, fairly literally. In the Scottish Division, for instance, a miner who was absent from the pits (serving a prison sentence for wife-beating) claimed his annual holiday pay. The Scottish Division of the National Coal Board took the view that the unusual circumstances of the man's absence were not the concern of the Board, and his claim was held to be valid.

An agreement on the miners' long-awaited five-day week was at last signed on May 5th 1947. It provided that the normal working week for underground workers was to be five consecutive shifts of 7½ hours each plus one winding/
winding time (i.e., the time taken to get a whole shift from the surface to the working level). The average for this for Great Britain was, as already stated, about 30 minutes. The amount of time it took to get the men from the pit face and back determined the actual amount of time spent at the pit face.

Provision was made, in order to prevent loss of earnings under the five-day week, for men who worked the full qualifying five shifts in a week to be paid a bonus. A man on a daily wage rate received a bonus equal to his average day rate for the week; a man on piecework received a bonus equal to 1/6th of his earnings (excluding overtime) over the five qualifying shifts. It was agreed that full shifts should be worked in order to prevent loss of output due to a reduction in normal weekly hours, and that by local agreement the miners' tasks should be increased in order to provide a fair day's work where existing tasks were insufficient. The opinion of the National Coal Board seems to be that the second part of the agreement—the increasing of miners' tasks—has been virtually ignored. In the words of a Labour Officer employed by the Scottish Division of the Board: "The provisions in the Five-Day Week agreement relating to production were more in the nature of pious hopes than binding clauses.

Whatever justification existed for the five-day week in an industry as strenuous and exacting as coalmining, the timing of its introduction—from the point of view of national production needs—could hardly have been more inopportune. Although Mr. Shinwell had stated in 1946 that "an organised Five-Day Week is ... widely regarded by mining engineers as desirable for the efficient working of modern mechanised mining," it was found necessary by the end of the year to ask the miners to extend their working hours. The Government had suggested to the National Coal Board and the National Union of Mineworkers that while the nation's economic "emergency" lasted (a somewhat ambiguous request) the miners should work an extra half-hour a day. The National Union of Mineworkers viewed the suggestion without enthusiasm, and suggested that a better result might be achieved by working Saturday shifts, while adhering to the principle of the five-day week agreement. They suggested that all workers in the industry should work at least two Saturday shifts in every four, at overtime rates of pay. The National Coal Board were not agreeable to this; they felt that it involved returning to the state of affairs before the introduction of the five-day week, with overtime rates for Saturday. Instead they proposed that all the conditions of the five-day week should be carried out in full, and that the men should voluntarily work an extra/
extra shift at normal rates of pay. All other conditions of the arrangement should be settled locally. In the discussions which followed the Government continued to urge the benefits of the extra half-hour a day, the miners advocated Saturday work at overtime rates, and the National Coal Board adhered to its view as stated. The Government left the final decision, however, to the two parties to decide. An agreement was at last reached on October 31st, 1947. Divisional Boards and the Area Executives of the National Union of Mineworkers were left to arrange whichever method suited them - either an extra half-hour each day, or Saturday work, or by a combination of the two.

It was emphasised in the agreement that the working of overtime must not interfere in any way with the cycle of operations on the five normal shifts or with the full carrying out of the Five-Day week agreement. The extra work was to be paid for at overtime rates, and the agreement remained in force until April 30th 1948. This decision contravened an act which had been on the Statute book nearly forty years - the Coal Mines Regulation Act, 1908, which had limited hours (in subsequent amendments) to 7 hours, plus "one winding time". Consequently an Order in Council had to be rushed through permitting the hours of work below ground to be increased to 8 hours plus "one winding time".

Districts throughout Great Britain made various choices; Northumberland, for instance, decided upon an extra half-hour per day; most other coalfields decided to work on Saturdays. In Scotland it was decided to stagger the extra working in order to reduce the demand for railway wagons, and half the collieries worked alternate Saturdays. The Agreement between the Scottish Divisional Board and the National Union of Mineworkers (Scottish Area) included the following provisions.

1) It is agreed that all collieries shall work eleven days per fortnight of which one day shall be an overtime shift and that the terms of the Five-Day Week Agreement shall apply in all respects.
2) It is also agreed that subject to agreement between the Divisional Board and the Executive of the Scottish Area, National Union of Mineworkers, any pit may work six days per week, the sixth day being treated as an overtime shift in terms of the Five-Day Week Agreement.
3) In view of the difficulties of wagon supply, it is agreed that every endeavor shall be made to stagger the extra Saturday to be worked.
4) The hours of work of the coal getting shift on Saturday where this shift is/

is an overtime shift, shall be 6½ hours plus one winding time. The hours of work of the consequential preparatory shifts at the week-end shall be normally 7½ hours plus one winding time...

9) In the event of the Management after consultation with a responsible Local Official of the National Union of Mineworkers, deciding, due to an emergency or wagon shortage, that work will not be available on a Saturday which, under this Agreement, would have been worked, they shall post a notice to this effect not later than the termination of the day shift on Friday and in this event, no guaranteed wage shall be payable for that Saturday or the consequential preparation shifts.

10) On the six-day week, the output of pieceworkers for the purpose of the bonus shift shall be calculated by dividing the total output by 6 3/15ths and multiplying by 5. The balance between that total output and the figure brought out as above, shall be the output attributed to the Saturday shift. The payment to pieceworkers for the Saturday shift shall be the output thus brought out at the normal rate plus 13/30ths of his average earnings per shift for that week.

11) Men paid on day wage shall be paid for working an overtime shift on Saturday - provided they work 6½ hours - 39/30ths of the normal shift rate where they work underground and men on the surface working the same hours, 39/34ths of the normal shift rate. Face workers who are paid day wages for a given task and who complete that task in 6½ hours on a Saturday shall receive the full shift payment at the appropriate overtime rate."

During 1948 the National Union of Mineworkers contended that payment of the guaranteed wage for Saturday working should not depend on attendance from Monday to Friday, a claim which was strenuously resisted by the National Coal Board. The matter was referred to the National Reference Tribunal, which, on June 22nd 1948, upheld the contention of the National Union of Mineworkers. The Agreement continued in force after the termination date, and continues to be renewed annually, subject to amendments. From 10th February 1951 a shortened shift of six hours was substituted (plus one "winding time") for the former six and a half hours (plus one "winding time"). This was intended to serve "as an encouragement to good attendance." 1.

Another concession was made to pieceworkers. Those who were transferred from their normal piecework on shifts worked under the Extended Hours Agreement (i.e., Saturday overtime shifts) were to be paid at whatever piece rates were/
were the higher - either the work to which he had been transferred or the daily average of his own normal piece rate earnings for the week in which the Saturday occurred. This provision, which came into force with effect from Saturday, February 3rd 1951, was subject to the approval of the Management which must be "satisfied that the workman concerned has performed a fair day's work."

Simultaneously with these post-nationalisation concessions with regard to the five-day week, hours of work, and holidays, the National Coal Board was granting a series of significant wage increases.

A new agreement was signed on December 18th 1947 which increased the national minimum weekly wage to £5:15: for adult underground workers and £5 for adult surface workers, with corresponding increases according to age for those under 21 (varying from £4:4/6 to underground workers at fourteen to £2:1/- at twenty). The shift rate payable to underground (adult) dayworkers was increased by 2/6 per shift, but "not so as to increase any such rate to more than 19/10 per shift exclusive of the war addition and the skilled shilling where payable." The increase was effective from the first full pay week in November 1947.

This agreement, however, failed to settle two important questions. The first was the question of whether the wartime bonus should be added to each shift or to only a limited number of shifts; the second was whether the bonus should continue to be linked to the cost of living. It will be remembered that the "War Additions to Wages Agreement" of 1940 (see page 53) had provided for a bonus to be added to the miners' wages to meet wartime increases in the cost of living. The bonus was a shift bonus (e.g., if a man worked four shifts in a week he drew four of these cost-of-living bonuses). However, if he worked more than six shifts in a week, he could not qualify for more than six bonuses. This limitation to the amount of bonuses was applied in some districts and waived in others.

In 1945 the National Union of Mineworkers claimed that the limitation should be waived throughout the whole of Great Britain, but their claim was rejected by arbitration. The signing of the Extension of Hours Agreement strengthened the miners' case and led to a renewal of their demands. If the working of regular overtime was necessary in the national interest then the miners should receive their cost-of-living bonus on the overtime shifts. The National Coal Board refused to accept this argument, and the claim went to arbitration. This time the decision was given in favour of the National Union of/
of Mineworkers, and the award came into force in September, 1949. The exact amount of the bonus was also the subject of controversy. Under the 1940 agreement it was to vary according to the cost-of-living index, but the index was abandoned in 1947, and the bonus was left thereafter unchanged at 2/8d per shift. But a new "interim index of retail prices" was brought out by the Government; why could not a formula be adopted based on this new index, allowing the bonus to vary with changes in prices? This, at any rate, was the demand of the National Union of Mineworkers, and they furthermore argued that retrospective increases should be given. The National Coal Board replied that the miners had received ample and generous benefits since nationalisation, and their value was much greater than any increases that might have taken place under a straightforward cost-of-living index. To reintroduce a variable cost-of-living index into miners' wages, they argued, would make a complicated wages system even more complicated.

In November 1950 a new agreement was signed raising the weekly minimum for underground (adult) workmen from £5:15:– to £6:–:– weekly, with corresponding increases for juvenile workers. The agreement provided that, in the case of adult daywage workers the war addition of 2/8d per shift should be consolidated into existing shift rates (with proportionate amounts for juveniles). In the case of pieceworkers the war addition of 2/8d should continue to be paid as a flat rate payment per shift and was henceforth to be called the "1950 flat rate". Conditions governing the payment of this flat rate were to be the same as applied in the case of the war addition (i.e., paid on all time worked, and subject to the appropriate overtime addition where applicable). But, as the agreement emphasised, "on no account should this flat rate be consolidated into the pieceworkers' rates". In addition to the consolidation of the shift rate by the inclusion of 2/8d an increase of 6d per shift was granted to the adult underground dayworkers. The total was not, however, to exceed 23/- exclusive of the "skilled shilling" where payable.

In January 1951 the national weekly minimum for underground workers was raised by seven shillings to £6:7:–. The shift rate payable to the daywage men was increased by the addition of 1/2d. The ceiling daywage rate (excluding the "skilled shilling") now stood at 24/2d. The minimum rate payable to daywage workers in respect of week-end work and overtime, and to which the appropriate overtime addition was to be made, was 21/2d per shift.

It should be noted with regard to pieceworkers receiving daywage rates (e.g., where waiting time was payable) that the 1950 flat addition was paid only/
only in respect of shifts worked at piecework rates, the consolidation of the war wage addition within the daywage rate having been applied to shifts at daywage rates.

One further concession of the January agreement was that thereafter the minimum weekly wage was to be exclusive of the nominal value of concessionary coal. This meant, in practice, an addition ranging from 9d. to 1/6 weekly.

Thus the Minimum Wage now included, in its computation, the consolidated day wage, piecework earnings, 1950 flat rate, and a further item - compensation for loss of earnings. Items excluded from the computing of the Minimum Wage were payments for overtime and week-end work, working during mealtimes, payments for ambulance duties, etc., and amounts paid to workmen as partial compensation. The terms of the Minimum Wage award could hardly have been interpreted more generously as far as the miners were concerned.

On 31st December 1951 another agreement was signed, increasing the minimum wage of adult underground workers from £6:7:- to £7:6:- and of the surface workers from £5:10:- to £6:1:6. At the same time the shift rate for adult daywage workers was increased, subject to certain "ceilings", by 2/3 in the case of underground workers, and 1/11 in the case of those workers working on the surface.

With regard to pieceworkers, the 1950 Flat Rate of 2/8 per shift (or the proportionate amount payable to juveniles) continued to be paid at the rate of 2/8d per shift on all time worked as pieceworkers, and was subject to the appropriate overtime addition where applicable. This Flat Rate was included in the aggregate earnings of pieceworkers for the purpose of calculating the Five-Day Week bonus. In addition separate Flat Rates (known as the "1951 Flat Rates") of 2/3 per shift and 1/11 per shift were payable to underground and surface pieceworkers respectively, and were subject to appropriate overtime addition. These 1951 "Flat Rates" were, however, to be excluded (for the purpose of calculating the Five-Day Week bonus) from the aggregate earnings of the pieceworkers concerned, but were to be paid for the bonus shift.

The minimum amount of the Five-Day Week bonus for pieceworkers was increased from 21/2 to 23/5.

Clause 10 of the agreement was concerned with "stabilisation". It ruled: "(1)(a) The parties hereto agree that during the currency of this Agreement no variation will be sought in the rates awarded in the existing operative
operative awards of the district conciliation machinery in the coalmining industry or in the district rates.

(b) Further the parties agree that the existing piecework rates shall continue in operation and no variation shall be made or sought to be made in these rates during the currency of this agreement except in respect of changed methods or conditions of working.

(ii) Clause 10(b) above shall operate with effect from the date of this Agreement and for a period of twelve months therefrom or until such time as the Joint Committee referred to in Clause 11 below has agreed revised methods and procedure for the regulation of wages and conditions of pieceworkers whichever period may be the lesser."

Clause 11 then went on to specify that a joint committee should be appointed by the National Coal Board and the National Union of Mineworkers to "consider the existing wage structure of the industry with particular reference to pieceworkers ... so as to achieve a more rational wage structure with greater uniformity in wages and emoluments for similar work and effort."

In 1952, however, came the biggest post-nationalisation wage demand which the miners had made. A letter dated 15th May 1952 from the National Union of Mineworkers to the National Coal Board asked for "a substantial increase in wages for all grades covered by the conciliation machinery - daywagemen and pieceworkers - irrespective of "ceilings"." The Board replied the following day to the effect that wage increases were prohibited by Clauses 10 and 11 of the existing Wages Agreement. The next move came from the National Union of Mineworkers on 12th June when Mr. A.L. Horner wrote: "I have been instructed to submit a claim for an increase of 5/- per shift for all daywage-men and pieceworkers, irrespective of "ceilings", and that the national weekly minima be raised by 30/-, i.e., to £8:10:6 for adults below ground and £7:11:6 on the surface."

The Joint National Negotiation Committee met on 26th June 1952 to enable the National Union of Mineworkers to present their case in support of the claim. The Union side stated that they realised that in view of the importance of the claim it would have to be considered by the whole Board; they would accordingly confine themselves to a general statement at that meeting and defer a more detailed presentation of arguments to a later meeting when all members of the Board were present. The National Coal Board side replied that they did not consider the claim to be justified, and the meeting adjourned.

A further meeting was held on 22nd July 1952, when the Chairman of the Board and/
and five of his Board members attended. But by this time the National Union of Mineworkers had added to their demands; they now submitted two supplementary claims. The first was that adult rates should be payable to persons of 18 years of age and over, and the second was that the five day week bonus should be modified and applied in the form of an extra payment for one-fifth of each shift worked.

These claims were of far-reaching importance in the whole development and structure of wages since nationalisation; the last one, particularly, was directed against the efforts of the Board to link wages in some way or another to regular attendance. It is therefore proposed to examine in some detail the various arguments and counter-arguments which revolved around this 1952 wage claim.

The main contentions of the miners may be summarised as follows:
1) There had been a continual decline in real wage standards of the miner.
2) The present wage was not a living wage, when account was taken of taxation, deductions for National Insurance, etc.
3) £8:10:6 and £7:11:6 were the least on which underground and surface workers respectively could be expected to live.
4) Rates of remuneration must be established which would accord with the importance of their work.
5) Productivity had increased largely as a result of the efforts of the workmen.
6) The miner was at a disadvantage compared with workers in other industries.
7) The need for manpower was urgent.
8) The increase was necessary to secure the goodwill of the workman.

The National Union of Mineworkers were in fact applying for an increase of 21.4% in the national weekly minimum for underground workers, and 24.7% for surface workers, and there is no doubt that the National Coal Board was somewhat taken aback by the magnitude of the claim.

The National Coal Board contended that the claim was inconsistent with the Agreement of 31st December 1951, and that it would add a direct addition to the wages bill of more than £50 millions. Furthermore it would have very serious repercussions both on the industry and on the economic position of the country in general. Let us examine the various main headings under which the Board resisted the claim. These may summarised as follows:
A) Inconsistency with the December, 1951 Wage Agreement.
B) Relation to the interim index of Retail Prices.
C) Relativity of Wages in the Mining and other Industries.
D)/
D) Manpower.
E) The Board's financial position.
F) The general effect on the national economy.
G) General comment on miscellaneous points raised by the Union.

(A). The National Coal Board cited clauses (10) and (11) of the 1951 Agreement, and argued that it would be inconsistent with "the spirit and intention" of this agreement to admit variations in wages until the Joining Committee had agreed revised methods and procedure for the regulations of wages and conditions of pieceworkers, or until the period of twelve months had elapsed from the date of the agreement. An increase given immediately, the Board argued, would complicate the overhaul of the wages structure on which the Board and the National Union of Mineworkers were engaged. To grant the claim would be to "perpetuate all the existing anomalies and make it more difficult to deal with them."

(B). It will be remembered that when the War Addition Agreement of 1940 was rescinded the National Coal Board agreed that in considering wage claims they would take the cost of living into account as one of the relevant factors (although not, of course, as the only factor). The Board therefore proceeded to examine changes in the cost of living between the first full pay week after 22nd November 1951 (when the miners received an increase under the 1951 Agreement) and May 1952 when they submitted their next application. In that time the "Interim Index of Retail Prices" had risen from 129 points to 135 points or by 4.65%. But, as the National Coal Board pointed out (was it with conscious irony?), part of this increase in the index was occasioned by the increase in the price of coal as a consequence of the last increase in wages. Since the majority of miners received free or concessionary coal, the figure of 4.65% should be subject to a corresponding adjustment. Between May and the time of the wage discussions the index had risen slightly, to 138. It was admitted, however, that the withdrawal of the food subsidies would result in an increase in the price of certain rationed goods as from 5th October, but the Treasury estimated that together with previous cuts the additional cost would be equivalent only to 1/4/1 or 1/5 per head per week. Furthermore, the Treasury had calculated that as against this reduction of subsidies of £10m. consumers would benefit from income-tax reliefs amounting to £180 m. and higher social security benefits amounting to £53m.

In this connection, the National Coal Board argued, it had to be borne in mind that in October 1951, when the miners' previous claim was first considered/
considered by the Joint National Negotiating Committee the increase in the cost of living had only amounted to 8.6% corresponding to an increase of approximately 1/7 per shift. In the final settlement, however, an advance of 2/3 had been given, as we have seen, to underground workers and 1/11 to surface workers. This represented an increase of 10.63% on the underground minimum and 10.45% on the surface minimum. Thus, some of the increase which had taken place since the last settlement was already discounted and allowance should be made for this fact in comparing the present position with that at the time of the previous settlement. The relationship between the claim and the underground and surface weekly minima and the interim index from June 1947 is shown below.

<table>
<thead>
<tr>
<th>DATE</th>
<th>UNDERGROUND MINIMUM</th>
<th>SURFACE MINIMUM</th>
<th>INTERIM INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1947</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>December 1950</td>
<td>120</td>
<td>117</td>
<td>116</td>
</tr>
<tr>
<td>January 1951</td>
<td>127</td>
<td>122</td>
<td>117</td>
</tr>
<tr>
<td>November 1951</td>
<td>140</td>
<td>135</td>
<td>129</td>
</tr>
<tr>
<td>June 1952</td>
<td>140</td>
<td>135</td>
<td>138</td>
</tr>
<tr>
<td>CLAIM</td>
<td>170</td>
<td>168</td>
<td>138</td>
</tr>
</tbody>
</table>

Was it not obvious, asked the National Coal Board, that underground and surface minima had increased commensurately with the interim index? If account were taken of the appreciation in the value of allowances in kind, the movement would appear even more favourably to the miners. The National Coal Board claimed that deviations in the order of 2 or 3% between the minimum wage and the interim index were not sufficient justification for an increase in wages. (They might have stressed that such deviations certainly did not justify the increase in the minima of 21.4% which the miners were claiming). Furthermore, it was pointed out that as compared with the pre-war position the real wages of miners were about 65% higher than in 1939.

(C). With regard to the relativity of wages in coal mining and other industries, the National Coal Board evidence concentrated upon the index number of rates of wages for various industries, and upon figures of average earnings. Taking August 1939 as 100, the Board pointed out that the index number for wage rates in coal mining in August 1952 was 357 as compared with an average of 215 for other industries excluding coalmining.
### Average Weekly Earnings: October 1951

<table>
<thead>
<tr>
<th>Industry</th>
<th>Male Adults</th>
<th>% Increase since October 1948</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coalmining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>211/11</td>
<td>25.1</td>
</tr>
<tr>
<td>Allowances</td>
<td>8/10</td>
<td>23.3</td>
</tr>
<tr>
<td>Manufacture of Motor Vehicles and Cycles</td>
<td>200/1</td>
<td>19.4</td>
</tr>
<tr>
<td>Cement</td>
<td>198/2</td>
<td>32.4</td>
</tr>
<tr>
<td>Steel Sheet Manufacture</td>
<td>196/8</td>
<td>21.6</td>
</tr>
<tr>
<td>Tinplate Manufacture</td>
<td>196/6</td>
<td>23.6</td>
</tr>
<tr>
<td>Iron and Steel Rolling and Smelting</td>
<td>193/5</td>
<td>18.5</td>
</tr>
<tr>
<td>Manufacture and Repair of Aircraft</td>
<td>190/8</td>
<td>20.7</td>
</tr>
<tr>
<td>Manufacture of Motor and Aircraft Accessories</td>
<td>186/5</td>
<td>18.2</td>
</tr>
<tr>
<td>Blast Furnaces</td>
<td>186/3</td>
<td>19.5</td>
</tr>
<tr>
<td>Machine Tools</td>
<td>184/3</td>
<td>24.7</td>
</tr>
<tr>
<td>Non-ferrous metals, smelting and rolling</td>
<td>182/9</td>
<td>20.5</td>
</tr>
<tr>
<td>Iron and Steel Forgings</td>
<td>180/1</td>
<td>19.3</td>
</tr>
<tr>
<td>Boilers - Boilerhouse Plant</td>
<td>179/8</td>
<td>17.5</td>
</tr>
<tr>
<td>Carriages and Wagons</td>
<td>174/5</td>
<td>13.6</td>
</tr>
</tbody>
</table>

These figures include all classes of manual wage-earners, including skilled and unskilled, and represent average of the actual earnings of piece-workers and timeworkers in the particular week selected, inclusive of payments for overtime. They also take account of overtime and short-time working (as given in figures published by the Ministry of Labour in respect of March, 1952). This enquiry showed that the number of hours of overtime worked in manufacturing industries in the week ended 24th May, 1952, was 7% hours on the average for 1,159,000 persons on overtime. So far as short-time was concerned there were 304,000 persons - mainly in the textile industry, and the average number of hours lost was 17.

The point emphasised by the National Coal Board, however, was that in October 1951, (a less favourable date than a later one) average earnings in coalmining still occupied the topmost position in relation to the 145 industries listed by the Ministry of Labour.
With regard to manpower, the National Coal Board admitted that comparative wage rates are not the only factor taken into account by persons seeking industrial employment. Nevertheless, if there were any maladjustment in the wage rates it was usually reflected in the figures of recruitment and waste. Yet a comparison of figures for the coalmining industry for the first 34 weeks of 1952 (i.e., up to the week ending 23rd August 1952) showed an increase of 22,738 in the number of persons on the colliery books, the total at the 23rd August being 720,661. This represented an increase of rather more than 3% since the beginning of the year.

Recent trends in recruitment and wastage, the National Coal Board argued, had also been very satisfactory. Recruitment during the first 34 weeks of 1950, 1951 and 1952 had been as follows:

<table>
<thead>
<tr>
<th>FIRST 34 WEEKS</th>
<th>JUVENILES UNDER 18</th>
<th>ADULT NEW ENTRANTS</th>
<th>RE-ENTRANTS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>10,818</td>
<td>10,550</td>
<td>14,533</td>
<td>35,901</td>
</tr>
<tr>
<td>1951</td>
<td>14,339</td>
<td>13,906</td>
<td>21,593</td>
<td>50,038</td>
</tr>
<tr>
<td>1952</td>
<td>20,149</td>
<td>15,733</td>
<td>19,097</td>
<td>54,979</td>
</tr>
</tbody>
</table>

These figures show that juvenile recruitment for 1952 period was almost double that for 1950, while recruitment for adult new entrants showed a 50% increase, and that for re-entrants an increase of about 30%.

Figures for wastage were also cited to reinforce the National Coal Board's argument (the period of wastage being taken as the first 34 weeks of 1950, 1951 and 1952):

<table>
<thead>
<tr>
<th>FIRST 34 WEEKS</th>
<th>VOLUNTARY</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>33,313</td>
<td>17,203</td>
<td>50,516</td>
</tr>
<tr>
<td>1951</td>
<td>25,512</td>
<td>14,923</td>
<td>40,435</td>
</tr>
<tr>
<td>1952</td>
<td>18,117</td>
<td>14,323</td>
<td>32,440</td>
</tr>
</tbody>
</table>

Voluntary wastage was thus only 55% of the figure recorded for the corresponding period in 1950, and 70% of the figure for 1951. Other wastage for 1952 was about 80% of that for 1950 and practically the same as in 1951.

In this way the National Coal Board sought to establish the point that the coalmining industry was able, at existing wage rates, to secure the number of recruits that it required in order to maintain its labour force. Accordingly, there was no reason to adjust wage rates in order to attract a larger volume of recruits.

With regard to the National Coal Board's financial position, it was argued that the claim could not be met out of its existing resources.
During the year 1951 the loss shown by the Board's accounts had amounted to £1.8 m. There had been a small surplus on revenue account, during the first quarter of 1952, of £250,000, but there had been a deficit of £728,000 during the second quarter. The Board was under a statutory obligation to balance their accounts on an average of good and bad years. Even though the state of supply and demand had been in favour of the National Coal Board, it had not yet been able to convert its deficit into a surplus. Neither had it been possible to establish an adequate reserve fund, which then amounted to £3 m. Since nationalisation, the annual wages bill had risen from £248.6 m. in 1947 to £333.3 m. in 1951, and for the first six months of 1952 it was at the rate of £378 m. per annum. The wages cost per saleable ton rose from 26/10.9d in 1947 to 35/4.7d in the second quarter of 1952. If granted, the miners' new claim would cost the National Coal Board £50 m. - equivalent to an increase of 5/- per ton in the price of coal. This would lead in turn to an increase of between 7/6 to 10/- per ton of steel. The claim would set in motion repercussions on the cost of materials that the Board purchases, and on the costs of transport.

(F). The general effect on the national economy would be serious, argued the National Coal Board, in view of the dangers of inflation at home and the adverse balance of payments abroad. An increase in wages in excess of an increase in productivity would strengthen inflationary forces, accelerate the rise in prices and result in lower standards of living. Costs of production would be cumulatively increased, while competitive ability on the export market would be diminished. The nation's capacity to import food and raw materials would seriously decline.

The National Coal Board cited the familiar data about our unfavourable balance of trade, and comparing the present parlous state of the nation with the position in 1938. It pointed out that the volume of United Kingdom exports in the first half of 1952 was 3% less than in the second half of 1951. While the volume of imports had fallen by 10%, the reduction in value had been only 8% because of price increases. German and Japanese exports, however, were increasing rapidly.

The Board's contention was, in fact, the reproduction of an elementary lesson in orthodox international trade theory: "The position is therefore critical and would be worsened by increases in wages, unless productivity has risen, inflate the cost structure and reduce exports. If the country's position is to be made secure it is not sufficient merely to strike a balance but also to go further and establish a surplus to enable the country to withstand/
withstand fluctuations in the demands of the sterling area on our reserves, to repay outstanding debts and re-establish our foreign investments and ensure future markets for our goods."

(G). With regard to various miscellaneous points put forward by the National Union of Mineworkers, the Board's defence was equally vigorous and uncompromising. They alleged that the National Union of Mineworker's emphasis upon the difficult, dangerous and dirty character of work in the industry was invalid. This fact had already been taken care of in fixing wages under previous wages agreements, and there had been no increase in the death rate or in the rate of reportable injuries to justify further consideration of this matter. Furthermore the extra danger involved in working underground had already been covered by the differential rates between underground and surface workers.

The Union's claim that the increase in earnings had been very largely accounted for by increases in productivity was strongly denied. Output per manshift had increased 1.14 tons in 1939 to 1.21 in 1951, or by 6%; earnings per shift, allowing for changes in purchasing power, showed an increase of approximately 65%. Between 1947 and the second quarter of 1952 productivity increased 20% from the low level of 1947, while average cash earnings for workmen of all ages rose from £6:13:- to £10:8:9 for the second quarter of 1952, or by 57%. If the figure of allowances were included the figures became £6:18:9 for 1947 and £10:17:5 for the first quarter of 1952. If the corresponding figure for adult male workers only were taken, this was £11:8:2 per week of 44/3 per manshift worked.

It must be remembered that facilities to mineworkers had also increased. The 7,702 coalcutters in use in 1947 had risen to 8,388 in 1951. Numbers of pneumatic picks, mechanical drills, conveyors, etc. had all increased. The percentage of coal cut by machines rose from 75% of the total output in 1947 to 81% in 1951.* The National Coal Board's strongest point, however, lay in the comparison with 1937 figures. In 1937 only 57% of the coal was mechanically cut and 51% mechanically conveyed, yet the output per man per annum was 309 tons as against 303 tons in 1951.

The Board emphasised that it had spent £136 m. on capital account in the period 1947-1951, and the National Plan for 1950-1965 provided for capital expenditure (at 1949 prices) of £635 m. It added somewhat plaintively: "The Board are entitled to expect that with the wholehearted co-operation of the workmen, the figures of output per manshift will show a much greater increase than/
than has been apparent so far." How far, in fact, it was already receiving this wholehearted co-operation will be considered in the chapter on consultation at the undertaking level.

Nor could the National Union of Mineworkers seek refuge behind the recent budget. It was true that food subsidies had been reduced, but a married man earning £12:10:- (nearly ten shillings below average weekly cash earnings at the face in the first quarter of 1952) would have to pay 11/3 less in income tax than previously. Surface workers with an average weekly wage of £8:12:- would save 4/6d per week.

As for the claim that the figures of £8:10:6 and £7:11:6 represented the lowest amounts on which persons could live, the National Coal Board pointed out that there were large numbers of people in other industries living on very much less. Workers on the surface at coalmines worked under conditions very similar to other industries; it was only underground workers who were subject to greater risk and this difference was already taken into account by the differential wage rates. The Union had drawn attention to the fact that export prices were in excess of inland prices and that the increased export programme for 1952 should accordingly result in better financial results for the National Coal Board. It was true, admitted the Board, that export prices were higher, "but it would be wrong to assume that this state of affairs will continue indefinitely ... it seems likely that Great Britain will have to face increased competition from West Germany and Poland." Another factor would be the impending Schuman Plan which aimed at achieving uniform prices among participating countries. It could hardly be assumed that Great Britain could go on increasing coal export prices.

The National Union of Mineworkers claimed that the present wage demand would have to be granted to "secure the goodwill of the miners". The Board was almost bitter in its reply: "If the improvements that have been afforded to mineworkers since nationalisation have not secured their goodwill, the obvious inference is that goodwill cannot be bought. Since vesting date the Board have made the following concessions -

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>£110 millions per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases in wages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increases in holiday pay</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Pensions</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Increase in supplementary injuries benefit</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Increase in supply of concessionary coal</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Additional welfare</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Share of maintenance of pithead baths</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Leaders/</td>
<td></td>
<td>£139</td>
</tr>
</tbody>
</table>
Leaders of the Union have for their part acknowledged that large concessions which the Board have made, and have expressed the view that the miners' terms and conditions are well ahead of those of miners anywhere else in the world, not excluding the United States.

One further point of controversy between the National Union of Mineworkers and the National Coal Board might be mentioned. The Union had alleged that it was not necessary to show that there had been a substantial change of circumstances when submitting an application for improved conditions. The National Coal Board replied that its understanding of the Conciliation Scheme was that a substantial change in circumstances had to be shown in order to vary existing awards, decisions, and settlements. Such a substantial change had not in fact taken place.

As for the supplementary claims, there was no case whatever for paying the adult rate at 18. This would have been a radical departure from the practice in industry generally, and would have disturbed the relativity with juveniles in other industries.

The request for an amendment of the Five-Day Week Agreement was similarly rejected. To have substituted an additional one-fifth to each shift worked in lieu of the existing bonus of one shift for each five consecutive shifts worked, would have reduced the incentive to regular attendance and been tantamount to an increase in wages of 20%. It would strike at the basis of the agreement and "remove one of the fundamental considerations which influenced the Board in agreeing to the introduction of the Five-Day Week."

The rejection of the miners' claim led to a submission of their case to the National Reference Tribunal. Mr. A.L. Horner, on behalf of the Union side of the Joint National Negotiating Committee, declared: "In the view of the Union, the Board's approach to the problems now confronting the industry, including wages, is narrow and sterile. A much broader and imaginative national approach is required if this country is to avoid the danger of a calamitous economic decline, and regain anything like economic power and independence in the world... In the opinion of the Union, the Board has reacted in a purely mechanical fashion to Government appeals for wage restraint, without even taking into account that such appeals have always been accompanied by the proviso that increases in productivity are a justification for wage increases... Mineworkers should receive the benefit of the increase in productivity that has taken place since 1947... The Union strongly deprecates the quotation by the Board of earnings figures which include overtime working."

Mr./
Mr. Horner's last named point was that the claim was for an increase in the national minima on the basis of the five-day week, and for an increase in shift rates. He argued that a position had arisen in the mining industry which his union could not tolerate indefinitely, viz., that many workers could only earn sufficient to live by working overtime. Nor, he suggested, should the Board overlook the fact that many of the reforms (holiday pay, pensions, etc.) they introduced were long overdue, and without them the country would have faced a catastrophic coal situation. He went on to draw attention to the fact that, in spite of improvements and safety measures, "one third of the total man-power is injured every year." (This reference was to the 237,833 workers in 1950 - the latest figures available - who were disabled for three days or more). Dangerous work of this kind surely deserved higher remuneration.

"The Union believes", declared Mr. Horner, "that the new national minimum is necessary, not only to attract additional men into the industry, but in order to satisfy the aspirations of those now in the industry. Good labour relations are important in every industry, but in coal mining they are of special importance, as a dissatisfied labour force can have serious consequences, not only to the industry, but to the country ... In concluding their case the Board stated that they could not afford to accede to the Union's claim; to this statement the Union's reply is that the industry and the country cannot afford not to meet the present claim."

The decision of the National Reference Tribunal (its twenty-fourth award) was handed down by Lord Porter on 27th October 1952. With regard to the alleged inconsistency of the claim with the terms of the agreement of December 1951 the National Coal Board's representatives had, at the last moment, decided not to press for a rejection on such purely technical grounds, and the Tribunal was consequently relieved of the necessity of interpreting Clauses (10) and (11) of this agreement. Nevertheless the National Coal Board asked for recognition by the Tribunal of the fact that a rise in wages had taken place such a short time before the present claim.

The Tribunal was obviously impressed by the facts relating to wages, average earnings, etc., place before it by the National Coal Board. It agreed with the Board that "no other heavy industry showed so great an increase and indeed, whereas coalmining wages in 1938 were well below those of a number of heavy occupations, by 1947 it had surpassed all competitors and since then has continued to widen the gap between earnings in other heavy occupations and its own."
With regard to the protest by the Union over including overtime payments in average earnings, the Tribunal pointed out that it was the practice in many industries to include such payments, and "there does not seem to be any reason why a different method of calculating should now be made."

The question of the bonus shift, however, gave rise to a different problem, and the Tribunal suggested that it should be the subject of separate negotiation later between the two parties.

It is interesting to note that the Tribunal referred specifically to economic considerations of a wide, national character.

"In coming to a decision the Tribunal are in no way bound to conform to the suggestions of wage restraint urged by the Government, but the monetary position of the Board and the general economic position require consideration and the fact that a reconstruction of the wage position generally is under discussion is in particular a matter which must influence their conclusions."

The Tribunal deprecated the granting of small increases in wages at frequent intervals to counteract such small increases in the cost of living as had taken place since the end of 1951. For this, as well as other reasons, already stated, the Tribunal turned down the National Union of Mineworkers' claim, and made no award whatever to the miners.

The claims for modification of the sixth-shift bonus and for non-adults had not been persisted in by the National Union of Mineworkers, and they were left for further discussion and future presentation to the Tribunal if desired.

Upon most of the points raised in the discussion of this extremely important wage claim it must be conceded that the National Coal Board won the day by the force of its case. Its statistical data was accurately and cogently presented, and was never at any point challenged by the National Union of Mineworkers. It was, indeed, hardly possible to challenge it. The National Union of Mineworkers' case was more emotionally presented, but woefully inadequately supported by facts and figures.

The claim that the miners exclusively should benefit from increasing productivity was one that the Tribunal could hardly have been expected to accept. It would have had startling repercussions upon the economic fabric of the country if the claim by those engaged in each industry to all the benefits/
On the other hand, the miners would be sacrificing their own interests by
benefits of technological improvements was accepted as axiomatic.
On the other hand, there was some justice in the miners' claim that they
had virtually suspended the operation of their hard-won five-day week at the
urgent request of the Government at a time of national crisis. The inclusion
of overtime payments in calculations designed to proved that miners were in
fact adequately rewarded seemed somewhat unfair viewed in this context.
The National Union of Mineworkers might not have been so easily refuted
if they had challenged some of the assumptions underlying the National Coal
Board's erudite statistical data. They might, for instance, have questioned
the validity of the Interim Cost-of-Living index. They might have challenged
the National Coal Board's accounting methods of "balancing its budget"; on
ideological grounds they might have challenged the inheritance of compensation
charges; they might have argued that with economies in distribution costs, wages
could have been increased without necessarily increasing the price of coal per
ton.
Such claims, it is true, might have been dealt with summarily by the
Tribunal. But in the line of attack chosen by Mr. Horner, there can be little
doubt that the miners were worsened in debate, and that it was impossible to
defeat the National Coal Board upon the ground on which it chose to defend
itself.
The rejection by the Tribunal of the miners' claim led to protracted
negotiations over the next few months. The National Union of Mineworkers final-
ly decided to put forward a more moderate claim. In February 1953 a national
delegate conference of the National Union of Mineworkers decided by 478,000
votes to 219,000 to authorise the executive to ask the National Coal Board for
1/- a shift for day-wagemen, "in the light of" an undertaking to recommend the
continuance of Saturday working. Among the minority was the Scottish Area of
the National Union of Mineworkers - which had initiated the original 30/- de-
mand and was resolutely against accepting anything below 2/6d a shift - and
the miners of South Wales. The veiled threat to stop Saturday work - a step
which the Scottish National Union of Mineworkers was urging upon other areas -
was one which the National Coal Board could not lightly ignore. The Saturday
working agreement was due to expire at the end of April, 1953, and unless it
were renewed the National Coal Board would lose about twelve million tons dur-
ing 1953 - almost exactly the quantity which it was hoping to sell abroad.
On/
On the other hand, the miners would be sacrificing their own interests by ending Saturday work. Although the Scottish Area of the National Union of Mineworkers was ostensibly critical of Saturday-working, the output figures showed that the rank-and-file miners in Scotland welcomed it; more coal had been produced by this voluntary work in 1952 in Scotland than in any other division. The lowest-paid miners had added about 30/- per week to their pay-packets by turning out on a Saturday, and they would hardly have appreciated the efforts of their union leaders if this addition had been sacrificed. Furthermore, as was pointed out, the National Coal Board would not lose financially by terminating the Extended Hours Agreement; every ton of coal brought out on Saturdays was an uneconomic one.1

Nevertheless, on 12th February, 1953, the National Coal Board announced that it had granted in full the miners' claim for an extra shilling a shift, starting the following week, in return for an undertaking from the National Union of Mineworkers executive to recommend the working of Saturday shifts in the following winter. The minimum rate of £7:16 for work underground was raised to £7:6:6.

The National Coal Board announced that the cost of the settlement would be a rise of between 6d. and 9d. in the price of a ton of coal, although in fact, the National Coal Board shortly afterwards raised the price by 5/- to 7/- a ton "to recover money lost last year and to balance the books in the future." National Union of Mineworkers officials were indignant that the National Coal Board's price increase left the public with an impression that the full amount was attributable to the wage award.

The text of the agreement between the National Coal Board and the National Union of Mineworkers, signed on 12th February, included the following clauses:

"The Union executive agrees to recommend that the extension of hours agreement shall be continued for a further twelve months from the end of April next."

"The Union executive will do its best in all areas to ensure that the Saturday shift is worked in all pits, and that the provisions of the existing agreement about a balanced shift are fully regarded." (This refers to the right of the mine manager to decide against Saturday work if too few men report for the extra shift. It is not usually profitable or even possible, to work a/

a shift unless the labour force available is balanced and includes all classes of miners). These given above (see page 32) fairly brief consideration has been given. "The Board and the union agree that the wages of the day wage-men shall be increased by 1/- a shift, with proportionate increases for juveniles." in 1919. "The work on the revision of the wages structure will be continued."

In addition to these clauses there were others promising increased efficiency and co-operation by the National Union of Mineworkers. These will be discussed in a later chapter.

**AVERAGE EARNINGS PER SHIFT OF COAL MINERS IN SCOTLAND COMPARED WITH THE AVERAGE EARNINGS FOR GREAT BRITAIN.**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SCOTLAND</th>
<th>GREAT BRITAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>10/10½</td>
<td>11/ 2½</td>
</tr>
<tr>
<td>1942</td>
<td>16/11½</td>
<td>17/ 5½</td>
</tr>
<tr>
<td>1943</td>
<td>18/ 4</td>
<td>19/ 3½</td>
</tr>
<tr>
<td>1944</td>
<td>20/ 7</td>
<td>21/ 8</td>
</tr>
<tr>
<td>1945</td>
<td>21/ 8¾</td>
<td>23/ 1½</td>
</tr>
<tr>
<td>1946</td>
<td>22&quot; 3¾</td>
<td>23/11½</td>
</tr>
<tr>
<td>1947</td>
<td>26/ 1½</td>
<td>27/ 8½</td>
</tr>
<tr>
<td>1948</td>
<td>30/11¼</td>
<td>31/ 9</td>
</tr>
<tr>
<td>1949</td>
<td>32/ 1½</td>
<td>32/11</td>
</tr>
<tr>
<td>1950</td>
<td>33/ 0½</td>
<td>34/ 0</td>
</tr>
<tr>
<td>1951</td>
<td>35/10</td>
<td>37/ 3</td>
</tr>
</tbody>
</table>

Surface Workers.

For reasons given above (see page 32) fairly brief consideration has been given to this miscellaneous group. Prior to 1919 the hours of work of these employees ranged from 48 to 50 hours weekly exclusive of mealtimes. Early in 1919 an agreement (negotiated nationally) came into operation providing for a uniform maximum of 49 hours per week exclusive of mealtimes. This was superseded in the same year by an agreement which was conditional upon the reduction of hours below ground, under which the weekly maximum on the surface was reduced to 46½ hours.

The Coal Mines Regulation Act of 1926 (see page 49) led to an increase in hours for surface workers comparable to that applied to underground workers. For all practical purposes the hours of work above ground became the same as those operating before 1919 (i.e., 48-50).

Under the district agreements which came into force, for Scotland, after the stoppage of 1926 there was one significant difference between surface and underground workers as regards wages. Provision was made for the payment of subsistence allowances to day-wage surface workers, but not for underground workers. To secure a minimum of 7/- per shift an allowance of 1/- was given to adult male workers of 18 and over who were receiving a gross daily wage of 6/-. Workers receiving 6/1 would receive a subsistence allowance of 1½d per shift, and so on in diminishing amounts to make up the minimum. Workers receiving a gross daily wage of 7/- thus received no subsistence allowance. In the case of male workers under 18, the subsistence minimum was 3/6 per shift. Thus a worker with a gross daily wage of 5/- received a subsistence allowance of 6d per shift. Female workers of 18 and over received allowances to bring their wages up to a minimum of 5/- and female workers under 18 up to 2/6 per shift. The agreements covering these surface workers (August 1927, March and August 1931, and April 1934) laid down various conditions of payment. Workers on partial compensation were excluded from subsistence allowances. The allowances were payable for each full ordinary shift worked, but not for overtime shifts. In no circumstances were individual colliery owners to pay higher subsistence allowances than those specified in the Scottish agreements, and no worker was to receive more than six subsistence allowances in any week of seven days. Where a full shift was not worked through causes beyond the control of a worker, a proportion of the allowance (according to the time worked) was to be paid.

After the outbreak of war the surface workers shared in the various increases awarded to the underground workers. In 1942 when the miners received their/
their minimum wage award of 83/-, surface workers received a national minimum of 78/-. By the end of 1943 the Miners Federation of Great Britain was demanding an increase to £5:10:- for surface workers, but this claim was rejected. In January 1944, however, surface workers received a national minimum of £4:10:-. Later in 1944 when wage ascertainment agreements were suspended, and percentage additions were merged in day-rates or piece-rates, skilled craftsmen and certain other classes of adult surface workers received an increase of 1/- a shift, known as "the skilled shilling."

Post-Nationalisation

In December 1947 the National Coal Board raised the national weekly minimum for adult surfacedmen to £5.

The weekly minimum for juvenile surface workers was fixed at a level ranging from 35/- at 14 to 77/6 at 20. The shift rate payable to adult surface day wage workmen was increased by 1/8 per shift, but not so as to increase the rate to more than 18/2 per shift exclusive of such items as the war addition and the "skilled shilling". There was some doubt raised as to the scope of this agreement. Various categories of workers wished to be included in the term "surface worker" now that it was believed that the newly-constituted National Coal Board would be liberal in its interpretation of awards. Such workers as chauffeurs, gardeners, scavengers, property repairers, fencers and drainers, watchmen, carters, bricklayers and labourers could claim with some justification that they worked "on the surface". A statement circularised by the National Coal Board made it clear, however, that the award applied only to those "workmen employed in activities owned and controlled by the National Coal Board whose wages and conditions of employment including basic rates of wages have in the past been regulated in conformity with the terms and conditions of employment negotiated for and applied to workmen employed underground and on the surface at collieries under the conciliation machinery of the coal-mining industry."

The statement continued: "Regulated in conformity means that Agreements and awards in the Coal-mining industry have been applied to them as if they were colliery workmen and whose basic wages were unquestionably co-related to the colliery workmen's rates, and whose wages and conditions of employment have not in any way been fixed or varied by Agreements or Awards negotiated or made outside the machinery of the coal-mining industry."

In November 1950 the minimum for surfaced men was raised to £5:5:-, and increases ranging from 5/- to 7/6 were given to juvenile workers. The shift rate/
rate for day wage workers was consolidated by the inclusion of the existing war wage addition of 2/8 per shift, and was increased by the addition of 6d per shift but not so as to exceed 23/- exclusive of the "skilled shilling."

In January 1951 the minimum was increased again, this time to £5:10:-, with 5/- increases all round to juvenile workers. For day-wage workers the shift rate was increased by 10d, but not so as to bring the ceiling day-wage rate above 22/2 exclusive of the "skilled shilling". In the case of men working partly underground and partly on the surface during the same pay week, the minimum wage of such men was to be calculated in accordance with the underground rate for any day on which they worked underground for the whole or part of any shift, and at the surface rate for any day on which they did not work underground. This arrangement enabled men to benefit from the higher underground rate wherever possible.

On 31st December 1951 another agreement was signed raising the minimum wage of adult surface workers to £6:1:6 and this was increased, under the agreement of 12th February 1953, to £6:7:6.

The terms of contract in Scotland under the 1907 agreement (regarding notices of resignation or dismissal) were fourteen days.

In the period of national wage awards during the Great War and immediately after the wages of engineers and boiler firemen kept pace with those of miners, and the agreements negotiated in Scotland from 1931 onwards covering general district wages and conditions were accompanied by agreements making similar concessions to the Scottish Colliery Engineers and Boilermakers' Association. Such agreements were signed by this union and the Scottish coalowners on October 16th 1931 and April 13th 1932.

With regard to hours of work, the 1907 Scottish agreement had been invalidated by the Coal Mines Act of 1911. This act was primarily concerned with safety regulations, but it introduced an important new principle in granting wide powers to the Secretary of State. Not only was he empowered to vary and amend any of the "Provisions as to Safety", but he was also empowered to make by order, "such general regulations for the conduct and guidance of the persons acting in the management of the mines or employed in or about the mines as may appear best calculated to prevent dangerous accidents and to provide for the safety, health, convenience, and proper discipline of the persons employed in or about the mines."

Under the Secretary of State's powers a large number of general regulations and...
Colliery Winding Enginemen and Boilermen.

The wages of enginemen in Scotland were linked to those of miners in 1907. An agreement dated 7th August provided that "the wages of winding enginemen shall rise and fall with miners' wages 1½d per shift for each 6½% on the 1888 basis-rate of miners' wages when the latter are 50% over basis and 1d per shift for each 6½% when miners' wages are under 50% over basis."

Where there was only one engineman working on a shaft, and provided the output of coal exceeded 400 tons per day, an additional wage of 3d per shift was to be paid. The wages of enginemen were thus kept in some sort of relationship (although not as directly as miners' wages) to output. Not only wages but hours of work were linked with output. Shafts working over 400 tons of coal per day were to have eight hour shifts. Daily workings of 300-400 tons were to have nine hour shifts, and under 300, ten hours. Enginemen had to be prepared, however, to work much longer hours if necessary on week-end shifts. Scottish enginemen did not enjoy such favourable conditions upon this score as their colleagues in England and Wales who usually enjoyed eight-hour week-end shifts. The terms of contract in Scotland under the 1907 agreement (regarding notices of resignation or dismissal) were fourteen days.

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Under the Secretary of State's powers a large number of general regulations and

2. Provisions as to Safety: Part II. Sections 29 to 75.
and orders were issued, and among these was one relating to the hours of work of winding enginemen. This limited the hours of work of winding enginemen thereafter to eight hours per day.

Post-Nationalisation

The introduction of the Five-Day Week on May 5th 1947 was by no means as welcome to the winding enginemen as it was to the miners. Instead of being able to work seven shifts a week if they desired (with overtime payments) the number of shifts which enginemen could work was now reduced. A new wage agreement was delayed by a strenuous inter-union rivalry between the National Union of Colliery Winding Enginemen and the National Union of Mineworkers as to who was to represent these employees (See Chapter IV). In 1948 the enginemen demanded a national minimum of 30/- a shift, but the National Coal Board argued that they were paid at least as much as any other surface workers paid by the day, and more than skilled craftsmen (who received the "skilled shilling"). Any general increase was unjustified, but the National Coal Board was prepared to examine sympathetically any individual cases of particular enginemen who might complain. This was not acceptable to the enginemen, and on June 2nd 1948 the claim was referred to the National Reference Tribunal. A minimum wage of 21/10d a shift was awarded. Winding enginemen whose wages had not been increased under the Increase in Wages Agreement by as much as 1/- a shift were now to have this increase, but their revised wages were subject to an upper limit per shift of 26/-. Winding enginemen already earning 26/- per shift would thus be excluded from any increase. In reaching its decision the National Reference Tribunal stated that the responsibility and exacting duties of winding enginemen gave them a special position among the workers of the pit, and this justified their being paid more than craftsmen. This judicious compliment failed, however, to blind the enginemen to the fact that the Tribunal had awarded them considerably less than the amount demanded. In July 1949 they demanded an increase to 35/- per shift, but the claim was deferred by the Tribunal owing to controversy as to which union was entitled to represent the winding enginemen.

Under the terms of the November 1950 Wages Agreement the minimum wage for winding enginemen was increased by 6d per shift making a new minimum shift rate of 22/4d. Subsequently under the January, 1951, Increase in Wages Agreement the shift rate was increased by 2/- per shift, but not so as to increase any rate to more than 28/- per shift including the "skilled shilling" and, where payable, any other flat rate. The minimum wage was increased from 22/4d to 25/- per shift including the "skilled shilling" and, where payable, any other flat rate.
Overmen, Deputies and Shotfirers

The wages and hours of work of this category of employees - the 'N.C.O's' of the coal-mining industry - kept pace with those of daywage men throughout the period under review. The various acts from the Coal Mines Act of 1911 onwards covered these workers along with other underground workers. From the 1911 act onwards, the Deputies' Federation urged that the wages of deputies should be paid by the State, so as to give them a position independent both of the miners and of the management, and this point was repeated by Mr. W. Frowen in his evidence to the Samuel Commission. It was urged that given freedom from all the parties they could better discharge the duties required of them under the various Acts and regulations. "While appreciating the object in view", declared the Royal Commission, "we do not think it would be served by the change proposed." The division of responsibility between the colliery manager and a class of independent deputies "would be a step in the wrong direction."

Consequently, deputies - along with overmen and shotfirers - remained the direct employees of the coal owners (and later of the National Coal Board) and their wages and conditions in Scotland were laid down in agreements between their union and the Coal Owners of Scotland.

Post-Nationalisation

The terms of the Five-Day Week Agreement necessitated a review of the hours and wages of overmen, deputies and shotfirers, which had been advancing (with the war additions, etc.) throughout the period of hostilities and immediately thereafter. Once the Five-Day Week agreement had been signed, the National Coal Board entered into negotiations with the National Association of Colliery Overmen, Deputies and Shotfirers. The deputies were paid daily like the miners, and the nature of their underground duties meant that many would not be needed on Saturdays when the Five-Day Week began. Consequently there was little difficulty in granting them the benefits of the Five-Day Week. Deputies' wages were advanced (in the general review of wages throughout the industry) by adding not more than 5/- to the shift rates, provided that the increased wage did not exceed the average shift earnings of piece-workers in the Division. This agreement was signed on 17th October 1947.

In March 1951 new scales were laid down for deputies. Henceforth a deputy designated Grade I was to receive a gross shift wage of 31/4 and a Grade II deputy 28/6.

Overmen/

2. Ibid.
Overmen, however, were paid weekly, and could not therefore be placed automatically under the Five-Day Week Agreement which stipulated that men paid by the day received at the end of five days an extra day's pay. And even with Five-Day Week working in the collieries, many had to attend on Saturday to attend to maintenance work, and all had to be ready to attend. On 4th November 1947 an agreement was signed providing that, while hours of work would remain as before, overmen were not to be paid less per week than a deputy at the same colliery would be paid who worked six shifts (i.e., five normal shifts and one overtime shift), and not more than £100 a year higher.

The 1947 agreements still left the shotfirers out in the cold. They complained that the gap had now widened between deputies and shotfirers, but had narrowed between shotfirers and daywage-men. Accordingly, in December 1947, they demanded an increase in wages to bring them up to within 2/- a shift of the Deputies' wages. The National Coal Board, however, denied that there should be any fixed national relationship between the wages of shotfirers and the wages of deputies. Although shotfirers were a special class of skilled underground workers they were not officials. Consequently there was no justification for a parallel increase. As there was no conciliation machinery for these workers, the matter was submitted direct to the National Reference Tribunal, and the Tribunal's decision was to be accepted by both parties as final. The Tribunal found against the claim of the shotfirers that their wages should be related to deputies', but suggested that there was a case for reconsidering the wages of shotfirers in relation to the wages of daywage-men. An agreement was at last signed on 1st July 1948 fixing a minimum of 23/6 a shift. Shotfirers whose wages had not been increased by as much as 1/6 a shift under the Increase in Wages Agreement of 1947 would now get this increase but their revised wages were now to be subject to a ceiling of 29/8d. Men already earning 29/8 or more would not get any increase. The award was, however, generously retrospective; it was to be paid from "the beginning of the first full pay week in January 1948".

A further Tribunal award in 1950 fixed a new minimum of 24/- a shift with effect from the pay week commencing 7th October 1950, and in January 1951 this was increased by 2/4d per shift to 26/4d. From January the new ceiling rate was 32/6 per shift for shotfirers.
CHAPTER IV.
Negotiations and Negotiating Machinery.

In the earliest days wages and other problems at a colliery like Arniston would be settled by direct arrangement between the coalowner and the miners. This did not preclude, however, informal discussions among owners as to what wages each was paying. Even as early as 1744, before slavery had been abolished, we find the Marquis of Lothian investigating the rates of wages paid by other coalmasters in the Arniston area. It is doubtful how accurate is the view of one distinguished Scottish coalowner, Sir Adam Nimmo, that the impetus to combined action came from the workers. "As the workmen began gradually to unite for common aims and objects, employers also began to draw closer together."¹

It is true that the earliest recorded meetings of Mid and East Lothian coalmasters were concerned with prices and tax grievances, but it is not fanciful to assume that such questions as wages were discussed informally among them. Insofar as these early meetings can be held to be the ancestors of the more formal owners' association of a later date, it is interesting to note a few details of their activities. In 1620 a Summer of excessive rain had reduced supplies of peat in Scotland, and the increasing export trade in coal at this time made it impossible to meet home demands for coal. The Privy Council accused the coalmasters of showing preference to foreign buyers, and it enacted that "native ships must be immediately served" in preference to foreign vessels, and at the prices current for the previous three months. For every contravention of the Act a fine of £100 was to be imposed. As a result of this Act, a meeting of Lothians coalmasters was held at Fawside Castle, and it was decided to raise domestic coal prices from 3/- per load to 4/-.

This met with vigorous consumer resistance, and a petition was submitted to the Privy Council by the inhabitants of Mid and East Lothian, pointing out that the owners had entered into a bond to the effect that the price should not be lowered without the consent of all parties. The Privy Council held the bond to be unlawful, whereupon the owners met again in March 1621 to discuss joint remedial action. Between 1625 and 1649 there were frequent meetings of Lothians coalmasters to protest against Acts restricting exports and fixing selling prices.²

Other purposes for which owners met were discussions on technical and organisational matters. They met, for instance, to discuss the changed conditions.

¹Sir Adam Nimmo, M.A., in a paper read to the Royal Philosophical Society of Glasgow (Economic Science Section). 10th February, 1915.
²Transaction of the Mining Institute of Scotland (1888): James Barrowman; "Scottish Mining Legislation."
conditions of working brought about by the Mines Act of 1842, which prohibited the employment of females underground and of boys under ten years of age. The adoption of Special Rules under the Coal Mines Act, 1872, was another innovation which resulted in joint action by the Lothians owners.

With regard to matters which fall more strictly within the scope of negotiating, there are records of meetings as early as 1837 to settle a three-months strike in the Lothians.

It is surprising, however, that the coalowners of this area did not form a regular association until the formation of the Scottish Coal Conciliation Board in 1900. The late 'nineties were a period of good trade for the Scottish coal industry and it was in an atmosphere of comparative goodwill that the "Board of Conciliation for the Regulation of Wages in the Coal Trade of Scotland" was brought into operation on 1st February 1900. The Board was to deal only with questions relating to the general level of wages, and not with local disputes (e.g., at individual collieries). This was more limited than the scope of some English boards (e.g., Durham and Wales) which dealt with all workers, above and below ground, and with individual disputes. The Scottish Board confined itself to underground workers and laid down a minimum and a maximum percentage above the standard wage, below or above which wages were not permitted to rise or fall. Its meetings were held monthly (compared with the practice of quarterly meetings usually adopted by the English boards) when applications from either party to alter the rate of wages were considered. The English practice in this respect seems to have been superior. As applications for alteration were based upon movements in the value of coal, the longer period prevented hurried and ill-timed judgements, and enabled both sides to decide whether the conditions of trade giving rise to the application were temporary or attributable to economic causes likely to be of long duration.

The Board consisted of twelve representatives elected by the coal owners and twelve by the miners. The chairman and vice-chairman were elected by the Board at its first meetings (they were Andrew K. M'Cash, coalowners' representative and Robert Smillie, miners' representative, respectively) but neither had a casting vote, being permitted to vote only in their capacity as representatives. A secretary was elected from each side. Questions relating to a general change in wages were referred to the Board; in the event of failure to agree, the meeting was adjourned for a period not exceeding fourteen days.

days to allow the matter to be discussed by the constituents of both parties. In the event of a disagreement at the second meeting a neutral chairman was called in to settle the matter, but only if both parties agreed to that course. His decision was final and binding on both parties. The first neutral chairman was Lord Ardwall.

The Board was scheduled to last until 1st August 1901, but it was periodically continued, and the minimum and maximum were recognised by employers and employees as governing the settlement of wages, until the minimum was raised in 1909. The 1909 agreement introduced an important procedural change. Henceforth it was obligatory to call in a neutral chairman (whose decision in cases of difference was to be final and binding) in cases of deadlock, whereas previously the mutual consent of both parties had been necessary. This chairman was to be selected by both parties, or, failing agreement, by the Speaker of the House of Commons. Clause 3 of this agreement (dated 3rd August 1909) stated that "the neutral chairman in giving his decision as to alterations in the rate of wages shall take into account the state and prospects of trade."

The formation of the Board led to the setting up of the Mid and East Lothian Coalowners' Association, under the chairmanship of Mr. James A. Hood. In 1907 came the establishment of a new and more comprehensive association, the Lothians Coalowners' Association of which Mr. Hood became the chairman. He held this post until 1920 when he was succeeded by Mr. Adam Nimmo, the Chairman of Edinburgh Collieries Ltd.

The formation of the Board found the miners fairly well organised both on a Scottish and a district level. The first Scottish miners' union dated from 1835. In 1852 came the formation of the Scottish Miners' Association "for the protection of miners' rights and privileges, by providing funds for the support of members out of work". This association was composed of local societies, each holding its own money and remitting what was required to cover the expenses of the national association. There was a central board, consisting of three members, who summoned a conference of delegates from district societies when any matter of general interest came up for consideration. The entry money at this time was sixpence, and there was a weekly contribution of one penny. In 1887, after a period of intensive re-organisation, the Scottish Miners' Federation was set up, dedicated to agitations for the introduction of the eight hour day (a measure which the National Union, in England, refused to support). It was in fact two Scots Members of Parliament who tried unsuccessfully to introduce a clause enacting the eight-hour day into the Mines Regulation Act of 1887. They were/
The depression in the late 'sixties, however, led to the demise of the organisation, and it was not until 1872 (a period of prosperity when wages had risen to nearly 10/- per day) that a new organisation was launched under the name of the Mid and East Lothian Association. This union was recognised by the employers, for the purposes of collective bargaining, in 1888, and in June 1892 a district Board of Conciliation was formed with six representatives on each side. The system broke down, however, when the owners reduced wages in 1894, culminating in a sixteen week strike. A revival of trade in 1897 led to a growth in union membership, and the officers of the Mid and East Lothian Association played a prominent part in the discussions leading to the setting up of the Scottish Coal Conciliation Board. These officials were Mr. George Young (President), Mr. JamesOrmiston (Vice-President) and Mr. Robert Brown (Secretary). In the 1912 strike to enforce an individual minimum wage in place of an average minimum (a strike which culminated in the Minimum Wage Act) the Mid and East Lothian Miners' Association expended £21,513 out of their total fund of £24,000. The Lothians area did not produce the same militant unionism as the West of Scotland. The rapid growth of the coal and iron trades in the West had resulted in the large scale immigration of Irish labourers in the middle of the nineteenth century. In the Lothians, however, the miners were usually of local ancestry, their forefathers having been engaged in mining for several generations. In his evidence to the 1842 Commission Mr. Ross of Loanhead Colliery admitted that in knowledge, moral courage and enterprise the Midlothian miners were inferior to other classes, due to their abject conditions, but "they are always respectful and/..."
and sometimes warmly attached to their employers, and exhibit none of the pert and disastrous behaviour of manufacturers; they listen with cheerfulness and much seriousness to the ministers of the gospel who come among them; they show, and probably feel, less jealousy of their superiors in rank and fortune than is generally shown by other partisans, and they intermeddle less with politics. It was also pointed out that although frequent interruptions had taken place through minor disputes, there had been no major strikes for some years, and the work was satisfactorily regulated by the men themselves.

And nearly thirty years later there is confirmation as to the steadiness of Midlothian men. "In the Lothians, where the relations between master and servant have been little disturbed by strikes or fluctuations in trade, the miners are superior in every respect to the same class in Lanarkshire and the West of Scotland generally ... a great proportion of those in the west are Irishmen, mostly of a very rough type." Generalisations of this kind must always be treated with caution. In the course of discussion with a man who had spent twenty-six years as a miner at Arniston (before and after nationalisation) I asked him for his views on the "character" of the people who dwell in this particular Midlothian village. "They are conservative in nature," he told me, "and there was never a strike in Arniston Colliery except in 1926 when the whole country came out." In answer to my question as to the militancy of the local union branch, he declared: "They took the easy way out sometimes. If the management said there were no profits, well what could we do?" The widow of a former Arniston Colliery manager who devoted most of his life to this area, Mrs. Lithgow, told me: "My husband never had an individual strike ... There was the 1926 strike ... but it was gentlemanly; we were rather a superior community ... I used to help the housewives with food provisions in 1926 but I never told my husband, of course ... Arniston was a very nice community and there was a high standard of intelligence ... I cannot understand why people in towns look down on the miner ... they should have come to the Burns Suppers in Arniston and heard the miners making grand speeches ... yes, they were nice people and I enjoyed my life among them very much."

These/
These observations upon the character of Midlothian miners span over a hundred years, and no survey of negotiations and negotiating machinery can afford to ignore qualitative factors such as these. It is true, however, that local factors of this kind played a decreasingly important part as the arena of negotiations was widened to Scottish - and later to the British - autonomy. The importance of their contribution to the field of industrial relations has more today in the arena of consultation at the undertaking level.

The Scottish Board of Conciliation enjoyed a limited amount of success from its inception down to the First World War. Although it did not prevent strikes completely, it had an educative influence upon the views of both employers and workers. Sir Adam Nimmo testified that "gradually developed a better understanding and feeling in the local association or district committees, and helped to make these increasingly useful." Between 1900 and 1915 twenty-eight cases were settled amicably, making alterations in the general rates, eleven by voluntary agreement and seventeen by decision of the neutral chairman. These successes were achieved in spite of the fact that questions of wages, as Sir Adam Nimmo put it, "appear to be fought with greater tenacity in the coal trade in Scotland than in any other part of the United Kingdom." The authority of the Board only established itself by degrees, but it made for greater cohesion among both workers and employers. On the side of the workers it led to the strengthening of the powers of the Federation vis-a-vis the local miners' association, while on the employers side it resulted in a more closely knit Scottish Coal Owners' Association, although in each case there remained a wide range of activities under local autonomy.

The aim of the Board, from the start, was to define by mutual agreement the questions likely to arise for consideration, and to limit the area of discussion as precisely as possible. It was recognised that the more points that surrounded and affected the question of wages at issue that had already been satisfactorily been disposed of by the agreement of the parties, the less friction was likely to arise. Thus a necessary adjunct to the constitution of the board was that either the rules and regulations of the board should by themselves define the questions and considerations to be discussed or that wage agreements should be reached, side by side with the rules of the Board, by the mutual consent of both parties and providing for the disposal of such questions and considerations. In fact, a series of such agreements, as outlined in the previous chapter, were reached between Scots coalowners and miners between 1900 and the outbreak of war.

The desire of the coalowners to equate wages with the selling price of coal was/
was more successful in Scotland than elsewhere, but it was limited by the insistence upon a minimum wage. The arguments of the coalowners that the interests of both parties were at bottom identical, and that it was as much in the interest of the workers to concede their employers an adequate profit as it was for the employers to pay a fair wage, merely begged the question as to what was "adequate profit" and "fair wages". This was the duty of the Board to decide, and all its elaborate scales of percentage movements in prices could not establish an automatic and non-controversial wage settlement system, as long as their remained differences upon the subject of the minimum wage and what was a fair basis price for coal.

The experience of the Board was very like that of other boards throughout Great Britain; it tended in the long-run to benefit the worker more than the employer. Compromises were usually in favour of the worker, and by consolidating his forces and lending the stamp of national and social approval to union organisation, the Board greatly enhanced the position of the Scottish miner. Furthermore, the workers' representatives insisted that the neutral chairman was not entitled, in connection with any application for an alteration of wages under existing circumstances to take into account new factors or conditions that had arisen since the previous wages agreement. If the neutral chairman did this, they argued, such a decision would, in effect, establish a new basis price against the minimum wage. In other words the neutral chairman would himself be dictating a new wage agreement - which was decidedly not his function! This attitude meant that the Board was latterly faced with deadlocks. Both parties, although they had abandoned the old agreement for the purpose of discussing new conditions, were still theoretically held rigidly to an expired agreement which was no longer equitable in the altered circumstances. The workers refused to allow arbitration upon the subject of the district minimum wage, preferring, if necessary, to fall back upon a test of industrial strength. The employers for their part did not wish to entrust an arbiter with matters that vitally concerned their interest (e.g., the permanent fixing of a basis price). Their view was that they could not allow compulsory arbitration to pronounce what wages they should pay and what profits they should earn. The experience of the Scottish Conciliation Board was that however precise and tidy is the concept of compulsory arbitration, it cannot be enforced in practice.

Although temporary adjustments were arrived at through the Board's procedure, the miners were looking beyond district agreements to some national system. They wanted a common standard of wages and conditions for every district, and,
and, if possible, hoped to bring the strength of the whole of the British Miners' Federation to bear upon any district which was lagging behind. The Miners' Federation, in 1910, passed a resolution instructing its executive committee to take reasonable steps to replace district conciliation boards by a single national conciliation board and to regulate wages upon common principles throughout the industry. The outbreak of war led to wage agreements, as already described, on a national basis, and thereby encouraged the miners to press for a continuation of some form of national regulation when the war was over. The miners regarded the 1921 settlement as inadequate, but it nevertheless represented a compromise between the miners' and the owners' viewpoints. While Scotland (along with other districts) retained the pre-control criterion for wage rates of capacity of the district to pay, the settlement wanted some way towards meeting the miners' demand by establishing a national board consisting of an equal number of representatives from the Mining Association and the Miners' Federation with an impartial chairman. Provision was made for district boards consisting of equal numbers of representatives from the district association of owners and miners. The agreement did not set out the detailed functioning of the national and district boards, but it was left to each to draw up its own rules. The agreement stipulated, however, that the settling of wages was the task of each district board, while the national board should be a final court of appeal from district decisions and a medium of contact between the Mining Association and the Miners' Federation. Although this agreement led to changes in England in the "Federated area", in Scotland and in some other English districts the settlement merely involved the continuation of the old district machinery, e.g., the "Conciliation Board for the regulation of the Wages of the Coal Trade of Scotland", although it was now referred to more succinctly as the "District" Board. The national board (which met for the first time on 21st July 1921) laid down various rules of procedure for itself. Representatives of the Mining Association and the Miners' Federation were to remain on the board for two years and be eligible for re-election. The president, vice-president, and independent chairman were elected annually, the president being chosen in alternate years from the Association and Federation members. If both parties failed to agree upon the election of the independent chairman he was to be nominated by the Lord Chief Justice. No regular meetings were stipulated in the rules, but the president was to convene meetings upon the request of either party. The questions then raised were submitted to, and considered by, the Board without the independent chairman. If parties could not agree upon questions arising out of the terms of the 1921 settlement, the meeting was to be adjourned/
adjourned for a period not exceeding twenty one days and the independent chairman was summoned by the secretaries to the adjourned meeting. The matter was again discussed, and in default of an agreement the independent chairman was to give a decision which was to be final and binding upon the parties. There were also the usual rules regulating the appointment of joint secretaries and their duties, for voting to be by sides, and for the appointment of sub-committees with delegated powers and duties. Rules could be amended at any meeting subject to one month's notice in writing of the proposed amendment. Another national agreement on similar lines was negotiated in 1924. The owners - both Scottish and national - were not happy, however, about these national agreements. As the Mining Association stated before the Samuel Commission: 1. "It is the firm and unanimous conviction of those engaged in the management and control of colliery undertakings throughout the country that it is essential to discontinue the negotiations of wages between one body representing all the colliery employers on the one hand and one body representing all the colliery employees on the other hand, and while it is not practicable to regulate the general rise and fall of wages at each individual pit they are convinced that it is necessary to return to negotiating wages in individual districts."

The General Strike brought the termination of the national board in 1926, and the mineowners' views prevailed in the period following the strike. There was a return to district agreements, and the autonomous body for Scotland became once more the Conciliation Board. The Scottish agreement was revised in 1931, 1934, 1936 and 1938. It revived the usual provisions governing procedure, e.g., voting by sides, and in default of agreement submission to an independent chairman. A basis rate of wages was declared, in the form of the rate prevailing in 1888 on which actual wages were computed as a percentage (as described in the previous chapter) and a fixed minimum percentage was added to the basis rate to be paid whether the proceeds of the industry permitted of it or not. The periodic assessment of the proceeds of the industry in Scotland was to be determined by the joint audit of colliery books by independent accountants acting for owners and men respectively.

The opposition of the coalowners to negotiations on a national level was roundly condemned by the miners during this period. In their 1927 report to the Trades Union Council, for instance, the Mineworkers' Federation had some hard things to say about the motives of the owners in abandoning national wage determination: /

determination: "Technically backward, carrying on its back the royalty owners, and robbed by the ancillary and distributing concerns, the coal-raising industry was faced with special difficulties from the competition of new fuels, new sources of power, new coalfields, with the dwindling of markets from these causes, and from the poverty of the peoples stricken by the World War. In these circumstances, the larger coal-owners, closely allied with the coal-using and coal-distributing concerns, and through their semi-monopoly position drawing substantial profits, determined to make use of the miserable position of the poorer collieries to stage a general attack on the miners' conditions."

The coalowners' argument in favour of a return to district negotiating was based upon the wide differences in conditions of production between districts. The coal industry was dependent much more than manufacturing industries upon natural conditions. Coal seams vary in respect of thickness, jointing, inclination and frequency of faults; pits vary in depth, roofs and floors or roadways vary in firmness and dangers; coal varies in quality. In fixing conditions of labour - particularly wages - allowance had therefore to be made for the natural, technical and economic differences between districts. If price was rendered uniform by the operation of the market, different wages might have to be paid for similar work at the various coalfields.

The outcome was that the coalowners' attitude to national negotiations was based on a claim to regulate wages by capacity to pay to a far greater extent than other industries. In Scotland this claim was carried even further than in England. In industries like engineering and shipbuilding during this period a movement was taking place towards national agreements. In these industries the underlying principle of wage agreements seemed to be that no employer could engage in the industry unless he could pay his employees a certain level of remuneration, variable only to a small extent by reason of the differences in costs of living in different localities. The coalowners, however, argued from the other end, i.e., that they could not pay more than a certain limit in each district because the industry in each district would not pay if they granted more. This argument was based, as indicated above, on the fact that whereas in manufacturing industry conditions were more similar between districts and plants could be erected as and where the manufacturer wished, in the extractive industries, like coal-mining, the nature and location of the undertaking was dictated by the nature and location of the mineral.

Furthermore, the owners argued that the experience of 1921-1925 had taught them national agreements magnified local controversies into national disputes and threatened/
threatened the industry with a stoppage throughout the whole country.

The miners argued that the colliery owners were tentatively beginning to co-ordinate selling prices of coal throughout the industry, and a nationally accepted minimum wage would stop districts undercutting each other. They were prepared to concede variations based upon geological conditions, costs of production and market factors, but they were extremely anxious to secure a national minimum which would not be changed by any district except with the approval of a national board representative of miners and owners throughout the whole of Great Britain.

The Coal Mines Act of 1930 for "regulating and facilitating the production, supply and sale of coal" and for the "constitution and function of a Coal Mines National Industrial Board" was an attempt to superimpose national negotiating machinery upon district boards. Part iv of the Act which set up the board provided that its members were to be appointed by the Board of Trade; six after consultation with the Mining Association, six after consultation with the Miners Federation, and four after consultation with the Federation of British Industries and the Association of British Chambers of Commerce (one between them), the General Council of the Trades Union Council, the Co-operative Union, and the National Confederation of Employers' Organisations.

The Board of Trade was also to appoint the Chairman, who was precluded from membership of any of the foregoing bodies. The National Board was intended to confirm and record agreements between owners and miners in the districts, and to deal with any disputes arising in the districts where the local machinery had failed to effect settlement and which had been referred to the Board by either party to the dispute.

The Act gave very limited powers to the Board; it could do little more in effect than express opinions to which nobody was obliged to listen.

The Mining Association, for its part, had no intention of listening, and refused to collaborate in the appointment of the six management members who were eventually appointed by the fiat of the Board of Trade without the aid of the Association. A recommendation made by the Board in 1934 with reference to a dispute in South Wales was completely ignored by the Mining Association, and the Chairman of the Board eventually resigned. The vacancy was never filled and the board ceased to function. The Coal Mines Act of 1930 was finally repealed by the Coal Industry Nationalisation Act of 1946. There was no further attempt in the coal industry to impose national negotiating machinery until the period of the Second World War. It is true that the 1935 coal strike led to the formation of a Joint Standing Consultative Committee, consisting of eight representatives from/
from the Mining Association and eight from the Mineworkers' Federation, "for the consideration of all questions of common interest and of general application to the industry not excluding general principles applicable to the determination of wages by district agreements." But, although the committee held fairly regular meetings, the owners would not discuss wage rates, and discussions were limited to such matters as welfare and Government policy affecting the industry.

With the outbreak of war the Joint Standing Consultative Committee was brought more into the centre of things, and its deliberations were turned more specifically towards conciliation matters. An agreement of 20th March 1940 pushed open the door for national wage agreements by making the following provisions:

1) The district wage arrangements shall continue to operate during the war, subject to mutually agreed alterations, but increases of wages necessary to take account of the special conditions arising out of the war, and particularly the increased cost of living, shall be dealt with on a national basis by means of uniform flat rate additions.

2) This agreement shall continue in operation until terminated by six months' notice on either side, which notice may be given at any time after, but not before, the cessation of hostilities whether the war and the state of emergency has been officially terminated or not.

No doubt the grave national dangers of 1940 explain the comparatively uncontroversial acceptance by both sides of these provisions. But clearly the uneasy truce could not be expected to last. With the Essential Work (Coal Mining Industry) Order of 15th May 1942, the scheduling of collieries became dependent on the Ministry of Labour and National Service being satisfied with the terms and conditions of employment, whilst scheduling involved a guaranteed minimum wage. This factor, combined with an easing of national tension as fears of invasion by the enemy passed, inspired renewed demands by the miners for a general overhaul of the methods of settling disputes in the industry.

Industrial tension seemed to be steadily mounting throughout 1942, and was stemmed only by the recommendations of Lord Greene's Board of Investigation which established the first national minimum weekly wage for adult mineworkers, and gave various other increases. Details of these awards have already been discussed in a previous chapter, and we are concerned at this point with the Board's supplementary report on industrial relations machinery. The Board's scheme/

1. Quoted in the Fourth award of the National Reference Tribunal, under the Coal Mining Industry National Conciliation Scheme, 21st January, 1944.
2. Statutory Rules and Orders: 707
scheme which came into operation on 1st May 1943, was put forward not merely as an emergency wartime measure but one which would "provide an effective method of dealing with questions arising in the industry for the settlement of which no satisfactory machinery has previously existed."

There were, it was pointed out, three stages at which wages and conditions of labour must be settled - nationally, in the districts, and at the pit. Questions requiring settlement might be pit questions, district questions or national questions. A satisfactory conciliation scheme should ensure that class of question was dealt with at the appropriate stage, and that there should be arrangements to transfer pit questions to the district, and district questions to the national machinery whenever this was necessary. This arrangement, as far as Scotland was concerned, represented an extension of conciliation machinery in both directions - upwards and downwards from the district level.

Although the scheme provided that purely district questions should be dealt with by district conciliation machinery "thus avoiding interference with the principle of district autonomy which is a fundamental element in the structure of the industry" it must have been obvious that a decisive step had in fact been taken towards national autonomy and that the definition of what were "purely district questions" was likely to narrow considerably in scope.

The top-level machinery was to comprise a National Conciliation Board consisting of a Joint National Negotiating Committee and a National Reference Tribunal. The former was to consist of 22 members, one half nominated by the Mining Association and the other half by the Miners' Federation of Great Britain. The Tribunal was to consist of three permanent members appointed by the Master of the Rolls (or by a Lord Justice of Appeal nominated by him) after consultation with the Association and the Federation. These members were to be appointed for a period not exceeding five years and must not be associated with the industry or members of the House of Commons or the House of Lords (except in the latter case by virtue of judicial office).

What then was to be the scope of the National Conciliation Board? Its jurisdiction was to cover all matters of a national character, and questions referred by the Ministry of Fuel and Power. The Tribunal was to have exclusive jurisdiction in relation to questions of interpretation of (a) the Conciliation scheme, (b) any award or decision given by the Tribunal and (c) any award, decision, or recommendation relating to a question of a national character (not being/
being an agreement between the two national associations) in force prior to the
operation of the scheme. Furthermore, the Ministry of Fuel and Power could
refer matters specifically to the Tribunal for decision or report. Although
these matters were to be within the exclusive province of the Tribunal, that
body was required to take into consideration the views of the members of the
negotiating committee before giving a decision. Other matters coming before
the National Conciliation Board should be discussed by the negotiating committee
with a view to settlement. Failing settlement within five weeks or such longer
time as might be specifically determined, the matter was to be referred to the
National Reference Tribunal sitting with assessors. A final decision given by
this body would be binding upon the national and district associations of
employers and workers and those associations would become responsible for
observance by all employers and workers affected whether associated or not. Pro-
vision was also made for proper district conciliation machinery where none
already existed. The Negotiating Committee, or failing agreement, the National
Tribunal, was to establish district conciliation machinery for an area if
necessary. Existing Conciliation agreements would not be considered to be
suitable unless they provided for: a district conciliation board, a district
referee to whom would be referred questions which the district board failed to
settle; settlements of the district board and decisions of the district referee
to be binding on the district associations and their members, and the transfer
of district questions to the National Conciliation Board in accordance with the
scheme.

Let us examine the nature of those district matters that were henceforth to
be dealt with by the National Board. They were:-
1) Where both sides of the district conciliation board concerned resolved that
the question be transferred;
2) Where the Negotiating Committee so resolves;
3) Where the National Tribunal, on reference to it by either side of the
Negotiating Committee decides that the question is likely to affect, or extend to,
other districts or to assume an importance beyond the district concerned or
seriously to affect the national interest;
4) Where, in the case of a matter which has been referred to the district
referee by either side of the district conciliation board the referee decides as
in (c); or
5) Where the question arises from failure to agree as to the making or revising
of an agreement in relation to wages or conditions of employment in the district,
and either or both of the national associations at the request of either or both of the district associations concerned required the question to be referred to the National Board.

It will be observed that this exhaustive catalogue leaves little room for "district autonomy", and there could have been little doubt that the miners' continual pressure for securing decisions at a national level would receive ample scope in the above provisions.

As far as the machinery for pit questions was concerned, the Board left it to the national and district associations of employers and workers to overhaul existing arrangements (where they existed) without delay and for all districts to implement schemes for dealing with disputes at the pit level. There were also provisions in the Scheme for the incorporation of settlements, awards and decisions in the individual contracts of employment and both parties were to prevent stoppages of work while questions were under discussion and settlement.

There was one problem facing the conciliating machinery, however, analogous to that which had hindered the smooth working of the old Scottish Conciliation Board. This was concerned with the right of the Tribunal to review settlements or awards made upon national questions in the light of any substantial change of circumstances since the date of award. It was finally decided, under the Conciliation Scheme, to accept the principle of such review. This verdict was tested in 1943 when the question arose as to whether the Tribunal had power to alter district wage arrangements in view of the National War Wages Additions Agreement of 1940 (see Page 53/) which was current for the duration of the war. The problem was submitted, by consent of both sides, to Lord Greene's Board which decided, on 11th May 1943, that the Agreement of 1940 should be regarded as open to review at the instance of either side, if they were able to establish a substantial change of circumstances.

Just as the Scottish conciliation machinery in 1900 had led to a more closely knit Scottish miners' federation out of such former loosely associated local unions of the Lothians miners, so did the national conciliation machinery of 1943 lead to a centralisation of union control throughout Great Britain. The existing Mineworkers' Federation was still a fairly loose federation which had grown out of the old district associations. There was now a need for a union which could exercise closer control over local matters, and which could more conveniently participate authoritatively in negotiations at a national level. Consequently, a special delegate conference at Nottingham in August 1944 approved a constitution for the new National Union of Miners which came into being in November 1944. The National/
National Union of Mineworkers controlled all questions of industrial policy henceforth, including strike action which now needed a two-thirds majority on a national vote. District associations became area councils handling purely local matters, and dealing with such schemes as friendly society benefits.

It would hardly be accurate to claim that the development of conciliation machinery during the war period was the outcome of spontaneous goodwill on both sides. Apart from the factors already mentioned which were impelling the industry towards some form of national machinery, the Government was applying pressure behind the scenes. It was able to do this by its control of the Coal Charges Account which it had set up in 1942. The financial details of this account fall outside the scope of our enquiry, but two features were relevant to industrial relations in the coal industry. These were items which formed important charges on the account: firstly, the guaranteed wage which was paid under the Essential Work Order and various wage increases awarded from 1942 onwards and, secondly, the "Necessitous Undertakings Scheme" for helping by grant or loan collieries whose output was badly needed but which were in such dire financial straits that their difficulties could not be met simply by district price increases. The Minister was thus in a position to placate the workers and to put pressure upon colliery owners through his financial control of the industry. He was also able to lift the financial burden of wage increases from the shoulders of the colliery owners and transfer it to the backs of the general public. Thus when Lord Greene's Board of Investigation into miners' wages recommended a wage increase of 2/6d per shift in 1942 the cost of the proposed increase bore much more heavily on districts and undertakings with a low output per shift than those with a higher output per shift. If the undertakings had been left to bear the cost through district price increases, these price increases per ton would have been widely different. The Minister of Fuel and Power therefore decided to increase the amount of levy from 7d. to 3/7d per ton and to pay from the Account to each colliery individually the actual cost of the wages award. Thus the precedent was set for the entire cost of meeting the award to be borne centrally by the Coal Charges Account. It need hardly be added that the public was charged 3/- extra per ton to enable the owners to pay the levy to enable the Coal Charges Account to pay the colliery owners to enable them to pay their workers the extra wages. The merit of the scheme was that, by pooling the proceeds of the price increase it avoided a national increase of price adjusted to meet the needs of undertakings with the highest cost, which would have been tantamount to a bonus to low-cost concerns.
The pressure that the Minister was able to bring to bear upon coal owners through these various financial manipulations was strengthened by the fact that funds raised by the coal charge were still not sufficient and money had to be advanced by the Exchequer. (When the Coal Charges Account was closed at the end of 1946 it showed that a deficit of £26 m. had been met by Exchequer advances).

Consequently, negotiators from both sides, from 1942 onwards, can hardly have failed to notice that the Government was holding the purse-strings of the industry. The situation was not without embarrassment, however, for the Government. Having instigated the setting up of a National Reference Tribunal, it must either support this Tribunal's decisions by making the necessary advances from the Account, where necessary, to cover wage increases, or it must reserve the right to be the final arbiter if it felt that such increases could not be afforded. But such an action would undermine the much-vaunted autonomy of the new coal conciliation machinery! Sir Adam Nimmo's predictions about the dilemmas facing a State-owned coal industry were already being realised in the chrysalis stage of nationalisation that was developing in 1942, 1943 and 1944.

Although the Government agreed to raise prices to meet the cost of the National Reference Tribunal's Fourth Award on 22nd January 1944 (when the minimum wage was raised) it stated "that any further increase in the total wage bill must be met from within the industry as a result of its own efforts." The Minister of Fuel and Power had obviously wearied of his task of cajoling and bribing the turbulent politicians of the coal industry.

The Minister attempted to extricate himself by fostering the consultations which eventually yielded the National Wages Agreement of April 1944 which laid down how wages in the industry were to be governed in the following four years. But agreement was only secured by a last minute promise by the Government that it would continue a system on the lines of the Coal Charges Account and would maintain the price of coal at a level which would ensure a reasonable credit balance for the industry.
Post-Nationalisation

Section 46 (1) of the Coal Industry Nationalisation Act, 1946, \(^1\) stated that:

"It shall be the duty of the Board to enter into consultation with organisations appearing to them to represent substantial proportions of the persons in the employment of the Board, or of any class of such persons, as to the Board's concluding with those organisations agreements providing for the establishment and maintenance of joint machinery for -

a) the settlement by negotiation of terms and conditions of employment, with provision for reference to arbitration in default of such settlement in such cases as may be determined by or under the agreements ..."

Although this was the first legal obligation ever imposed upon the coal industry as to the setting up of conciliation machinery, a national conciliation scheme between the Mining Association and the National Union of Mineworkers, as we have seen, had already been operating since May 1943. Discussions had also been going on in the few months previous to nationalisation, and in an agreement dated 5th December 1946\(^2\), the National Coal Board and the National Union of Mineworkers declared that they would continue, subject to certain modifications, the conciliation scheme of May 1943. Under another agreement signed on the same day, the National Coal Board and the National Union of Mineworkers adopted the existing wages and conditions agreements including the agreement of 1944.

As modified under nationalisation, the Joint National Negotiating Committee was composed of all members of the National Coal Board (representing the employers' side) and fourteen National Union of Mineworkers' representatives (on the men's side). Although the National Union of Mineworkers made provision for representatives of the union's Area Executives to be included among their number, no arrangements were made for direct representation on the Committee of Divisional National Coal Board nominees. This restriction of employer representation to the nine National Coal Board members was ended, however, in 1949 when the National Coal Board's side was reconstituted to consist of fourteen members, of whom only six must be members of the Board. This left adequate room for representatives of the Divisions. It should be mentioned, however, that Divisional representatives were permitted to attend under the 1946 arrangements, but only if their presence were required to discuss a particular topic. The 1949/...

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1949 revision was obviously badly needed, in order to enable Divisions to know what was being decided and to enable them to keep in step. The numbers were later increased to sixteen each side. There were two Chairmen, one on each side, and two Joint secretaries, the voting being by sides. Failing agreement, and with a limit of five weeks on the period of discussion, the question was to be referred to the National Reference Tribunal.

The National Reference Tribunal was continued with the same functions as before, and its members continued to be the nominees of the Master of the Rolls. In fact, the membership was not changed; Lord Porter (the President), Sir Frederick Rees and Professor T.M. Knox remained at their posts.

Members of the Tribunal must be in no way connected with the coal-mining industry, but their appointments are made by the Master of the Rolls only after he has consulted with the Board and the Union. The President (one of the members) has a casting vote, and when matters are referred to the Tribunal representatives of the National Coal Board and the National Union of Mineworkers side of the Joint National Negotiation Committee attend the hearing before the Tribunal and each side states its case. Two Assessors are appointed from each side to assist the Tribunal in obtaining all the facts, but the Assessors do not take any part in the Award.

The District Conciliation schemes set up in 1943 were continued with modifications. These Boards were made up of representatives of the Divisional Coal Board and the National Union of Mineworkers (eight from each side) and they negotiate upon matters affecting particular coalfields. Failing settlement of a district question under discussion, with a time limit of three weeks, the matter is referred to the arbitration of a District Referee whose appointment has been agreed by the two sides of the District Conciliation Board. The 1943 arrangement, whereby questions could be transferred from the district to the national machinery, was continued.

The dividing of the country into National Coal Board Divisions involved certain changes. District Boards were now to cater for territory covered by the National Coal Board's Division, and this involved asking the National Union of Mineworkers to change their districts to coincide with the Divisions. This step was opposed at first by the National Union of Mineworkers, but by the end of 1947 agreement had been reached.

It will be remembered that no provision had been made in the 1943 agreement for the settlement of questions arising at individual pits except where they reached the stage of discussion at the District level. In an agreement signed on

1. To illustrate the work of the Scottish Conciliation Board the proceedings of one of its meetings are reported in Appendix I (c) Page 649.
on 1st January 1947 this omission was remedied. The aim of the agreement was that "questions arising between workers and management at the pit shall be dealt with quickly and efficiently." The treatment of these pit questions can be best summarised by considering the sequence of events as follows:

First Stage: The first stage of the Scheme provides that when a dispute arises in the pit the issue should be discussed between the workman or the workmen concerned and the immediate official of the pit, with the object of reaching a settlement.

Second Stage: Failing a settlement within three days at the first stage there is provision for discussion between the workman or workmen concerned and the Colliery Manager or his appointed representative and a further endeavour is made to clear the difficulty.

Third Stage: The third stage occurs on a report to the appropriate Trade Union Official who is invited to take over on behalf of the men concerned the discussions commenced in the earlier stages for which purpose the reference to the fourth stage may be suspended for three days. (The Local Trade Union Official decides whether the question should be taken up by the Union or not.)

Fourth Stage: If further discussions with the management have not produced a settlement then the Trade Union official must write to the colliery manager asking for a meeting to be held between representatives of the Union and the Management (or, if the question is one raised by the management then the manager must write to the union). This brings into operation the "pit meeting" which must be held within five days of the request being made. At this meeting Area officials of the Unions and Area divisional meetings of the National Coal Board may be present. Agreed copies of minutes are given to both sides. If the dispute is still not settled within 14 days after the pit meeting it proceeds to the next level.

Fifth Stage: Failing settlement by the pit meeting reference is made to the joint secretaries of the District Conciliation Board, who must refer it immediately to the Joint Disputes Committee specially set up under the Pit Conciliation Scheme to deal with pit disputes. Membership and rules of procedure of these Disputes Committees are determined by the District Conciliation Boards and vary in each district. In some districts, in addition to the main disputes committee, sub-committees have been set up specialising in disputes arising over such matters as the five-day week or the guaranteed wage.

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The Joint Disputes Committee in Scotland meets fortnightly (on alternate Fridays) and is a very formal occasion. The Joint Chairman are Mr. Abe Moffat (National Union of Mineworkers) and Mr. Barbour (Labour Director of the National Coal Board). There are ten members on each side; all the miners' representatives are full-time officials and executive members of the National Union of Mineworkers, while the employers' representatives are mainly from the production side of the National Coal Board. The Scottish Division of the National Coal Board maintains that disputes are more the concern of the production experts than the labour officers, and these latter officials are restricted almost completely to an advisory capacity. This practice differs from some Divisions where the National Coal Board labour officers play a more vital role than in Scotland. It is open for an Area General Manager in Scotland to nominate his Area Labour Officer to the Joint Disputes Committee if he wishes, but the practice seems to be for him to nominate a production officer instead. The only exception is the Chairman, who is the Labour Director, but his authority derives from the fact that he is a full member of the Divisional Board rather than from his connection with the labour department of the National Coal Board.

The Disputes Committee has 14 days in which to discuss the dispute. If no settlement is reached in this period the question goes to the final stage in the machinery. Sixth Stage: The sixth and final stage is the reference to an Umpire whose decision on a pit question is final. This Umpire is selected from a panel appointed by the District Conciliation Board. An assessor nominated by each side must be present at all hearings by the Umpire. This is the last stage in the Pit Scheme and unless it is decided that the dispute raises questions of principle applying to the coalfield or country as a whole, the umpire's decision is final. Both the Board and the National Union of Mineworkers have agreed to accept any settlement reached at any stage in the scheme.

There is an important exception to the procedure followed above. This is in the case of alleged wrongful or unreasonable dismissal of workmen. An interim agreement to cover cases such as this was signed between the Scottish Area of the National Union of Mineworkers and the National Coal Board on 10th March 1948, and replaced by a National Agreement of 19th August 1948. This stated that in disputes regarding alleged wrongful or unreasonable dismissal, if no settlement were reached by the Pit Conciliation machinery at pit level the matter should go not to the Disputes Committee, but direct to the Umpire. Joint submissions should, however, be sent to the secretaries of the Conciliation/
Conciliation Board. Cases of this kind are only competent if notice in writing has been given to the Colliery Manager (or the Area Labour Officer in respect of workmen not employed at the colliery) within seven days of such dismissal. If the man's appeal is successful he is re-engaged and receives back payment.

According to one labour officer there have been cases where the umpire has reinstated a man, even although in his judgement he had contravened the Coal Mines Act disciplinary clauses. In one such case a man had received instant dismissal by the manager for taking matches and cigarettes down the pit, and for insolence when challenged. According to this labour officer, even the trade union was surprised when their appeal succeeded and the man was reinstated under the conciliation machinery! It can be said in favour of the procedure that it removes the worker from the arbitrary powers of management and brings a more humane and democratic approach into industrial relations. It avoids any possibility of victimisation by the management against certain workers - and there is evidence that this sometimes took place in the past. On the other hand, a manager may err on the side of the weakness rather than risk his judgement being reversed. For a man to be reinstated in defiance of the manager's edict detracts seriously from his authority. If this happens several times the manager fears that he will incur displeasure from Divisional level. From financial considerations alone a successful appeal means that a man receives back payment for time spent in idleness, while his absence may occasion some slight dislocation at the coal face.

At Arniston Colliery there has been only one pit conciliation meeting since nationalisation. This was in connection with "waiting time" arising from a breakdown in the pit, and the circumstances were as outlined below. One effect of such a breakdown is that piecworkers may have to spend long periods waiting for wagons. At one time this involved a loss of earnings, but in 1942, under the Essential Works Order, the Ministry of Labour introduced guaranteed payments for "waiting time." One condition, however, was that a waiting period of at least half an hour must elapse before payment could be granted. The regulation has never been amended, and the miners' view is that it has involved injustice. This was the basis of a dispute raised by miners at Arniston. Thus, four consecutive breaks of twenty-five minutes each do not qualify for payment. On the other hand, the National Coal Board argues, miners sometimes are able to complete their task as well as qualify for payment of "waiting time"; so what is lost on the swings on one occasion is gained on the roundabouts on the other. This is not the view of the Arniston miners, and the matter/
matter is at present on its way through the various levels of the conciliation machinery.

It will be recognised that the conciliation scheme puts both the Board and the National Union of Mineworkers under an obligation to ensure that the terms of such settlements and decisions are fully complied with and that no attempt is made to impair the working of the machinery. It will also be noted that time limits have been kept fairly restricted. In practice the machinery works more quickly than would seem from the foregoing summary. In a large proportion of the cases dealt with, settlements are reached at an early stage in the procedure thus avoiding the necessity of entering into the later stages. It is also a feature of the schemes that reference to the next succeeding stage for negotiation or arbitration may take place by agreement between the two parties earlier than the date of the expiration of the time limits indicated above.

Both the National Coal Board and the National Union of Mineworkers keep the machinery under strict review and are on the watch for bottlenecks which may require changes in the operation of the scheme. But both sides so far seem satisfied that the scheme provides the best possible form of procedure for settling disputes. This is not to say that the machinery has always been used, or that it has been used in the right spirit.

Most disputes in a pit are concerned with pieceworkers. Although pieceworkers have a national minimum they usually earn considerably more than this. It is over this surplus that many disputes take place, and its amount varies according to local conditions.

It will be remembered that mineworkers are paid in one of three fashions: piecework rates (according to the amount of coal wrought or work done); day-wage (i.e., shift) rates; or weekly rates. Generally speaking, faceworkers are paid piecework rates; rippers, packers, and underground repairers are paid piecework or day-wage rates, according to local custom; other workers, such as the men on haulage and most surface workers (other than foremen) are paid day-wage rates. Overmen are usually paid by the week and deputies by the day.

Piecework rates may be based on the output of an individual worker or of a team of men. Where piecework rates apply they are negotiated between management and men. They vary according to the nature of the seam to be worked, the difficulty of working, and the bargaining skill of the parties. The rates may be based upon the tonnage of coal or yardage of material cut, or upon/

1. See Appendix I(d) Page 669 2. See Appendix I(e) P. 670
3. See Appendix I(f) for an analysis of the causes of disputes which have led...
upon the number of yards of roof ripped or floor out, and extra payment may be made for exceptional working conditions, such as defective roof or wet workings. Piecework rates may be limited to a particular pit or seam. Daywage rates are negotiated nationally and normally apply to a whole district, but they may be supplemented by additional payments for particular duties.

The National Coal Board has been unsuccessful in its attempts to standardise piecework rates. Thus in a dispute over the tasks of pieceworkers in a particular pit there must be no reference to conditions and payments in another pit. The National Union of Mineworkers insists (and the National Coal Board has accepted) that "each seam shall be considered on its merits." Thus on a stripping task, for instance, a man may get 27/- a shift in one Midlothian pit, and a similar worker ten miles away gets 36/-.

It is left in each case to the manager and the local union branch to decide.

National Coal Board officers declare privately that the treating of each seam on its merits is scrupulously observed by them and conveniently ignored by the National Union of Mineworkers. In other words, workers in one pit quickly learn of more favourable contracts in a nearby pit, and urge their union to negotiate higher rates for themselves. But the manager at a pit is quickly called to account by the National Union of Mineworkers if he attempts to cite comparisons with other pits which militate against the union's claim.

The Manager has considerable powers to negotiate with the union and to award payments for various tasks, but an attempt to stand firm is likely to precipitate a dispute. He might say, for instance: "Do eight yards to-day, Jock." The reply might be: "Can't. Roof very bad. I'll do seven." Somebody has to give way, and it is frequently the manager. The manager also has power, for instance, to pay extra to a coal cutting machineman. There is no check whether the manager pays above locally negotiated contract rates. As one labour officer put it: "Nobody has time to or inclination to check the manager's payments; the accountant is not interested in contracts; the engineer is too busy on his own job. Can anyone blame the manager for paying the miners well above contract rates in order to avoid disputes. More money is paid out in the coal industry than in any other industry for the sake of keeping the peace ... I suppose you could call it blackmail, really."

These observations indicate why the National Coal Board has tried to devise a wages policy which would pay the same wage throughout the industry for the same amount of effort expended. The Porter Award largely solved the problem with regard to daywagemen, but no real progress has been made with pieceworkers.
pieceworkers. Disputes still revolve largely around what people feel is the fair remuneration; there is very little reference to measurable facts.  

The Wages Agreement signed in that year provided (clause nine) that a Standing Advisory Committee of Coal Owners and Engineers be appointed "with a view to adjust details of schemes of working under this agreement." No rules of procedure, however, were laid down for this committee; it merely specified that representatives from both the employers and employees should form the committee. The employees at this time were represented through the United Engine-Keepers Mutual Protective Association of Scotland.

The Miners' Federation of Great Britain made strenuous efforts in its drive for industrial unionism to absorb not only all the district associations of coal/newers and other underground workers but also organisations like that of the engineers. But although the Miners' Federation, before and after the First World War, embodied in its constitution the principles of federalism and local autonomy it made no provision for the representation at its delegate conferences, or upon its Executive Committee, of any distinct grades or sections. This is not to say that the failure to do so was the main obstacle to absorbing the engineers; there seemed to be little eagerness on the part of these skilled workers to be indentified with the miners' interests, and they did in fact form a National Federation of their own parallel with the Miners' Federation of Great Britain.

The Scottish engineeman continued to negotiate directly with the coalowners outside the District Conciliation Board for the Coal Trade of Scotland. In October 1931 an agreement was signed between the coal owners and the Scottish Colliery Engine and Boilerman's Association (as they now called themselves) to institute a standing committee to interpret the wages agreement of that year. It provided for "five representatives from each side to settle cases of dispute which may arise in the interpretation of any of the clauses of this agreement other than those relating to the method and operation of the ascertainmen... Failing agreement by the Committee, such disputes shall be

Winding/

by a neutral chairman, the decisions of the Committee or neutral chairman to be binding on all parties to the agreement." The duration of the agreement was for a period of two years from 31st October 1931, and after that period subject to a three monthly notice of termination by either side.

1. For an overall survey of disputes in the Coal Mining Industry, 1900-1951, see Appendix I(g) Page 672.
Winding Enginemen and Boilermen

The first machinery covering this category of workers dates from 1907. The Wages Agreement signed in that year provided (clause nine) that a Standing Advisory Committee of Coal Owners and Enginemen be appointed "with a view to adjust details of schemes of working under this agreement." No rules of procedure, however, were laid down for this committee; it merely specified that representatives from both the employers and employees should form the committee. The employees' at this time were represented through the United Engine-Keepers Mutual Protective Association of Scotland.

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Post-Nationalisation

Although some winding enginemen joined the National Union of Mineworkers, thereby gaining the facilities of powerful union in the field of negotiation, there seemed to be a feeling among enginemen that they were being overlooked in the national negotiations for improved wages and conditions which followed upon nationalisation. Consequently, in January 1947 came the formation of the National Union of Colliery Winding Enginemen, composed of several district unions some of which had broken away from the National Union of Mineworkers. The new union claimed recognition, but the National Coal Board viewed it with some suspicion and alleged that it was not qualified as regards membership to negotiate on a national basis on behalf of Winding Enginemen. The National Coal Board pointed out that many winding enginemen were members of the National Union of Mineworkers and were covered by the conciliation schemes agreed with that union. The next step came in January 1948 when Winding Enginemen at collieries who were members of the new union threatened to strike in support of the National Union of Colliery Winding Enginemen's claim. The Ministry of Labour set up a Court of Enquiry which heard evidence from the union, from the National Coal Board and the National Union of Mineworkers. The findings of the Court were that it would not be in the best interests of the industry or the winding enginemen themselves to recognise the National Union of Colliery Winding Enginemen as a separate negotiating body, but the Court admitted that arrangements within the National Union of Mineworkers for representing the interests of winding enginemen were not as good as they might be. They therefore recommended that when questions affecting winding enginemen were negotiated with the National Coal Board thereafter, representatives regarded by the winding enginemen as competent to represent their special interests should be included by the National Union of Mineworkers on the employee's side. This recommendation leaves little doubt that previous to that time the winding enginemen had good reason to believe that they were being inadequately represented by the monolithic National Union of Mineworkers. The National Coal Board then proceeded to negotiate with the National Union of Mineworkers about the wages of winding enginemen, and these negotiations culminated in the award of Lord Porter (described in a previous chapter) in June 1948. The winding enginemen were not satisfied, however, that the National Union of Mineworkers had put their case properly, and there was a renewed effort to break away from the National Union of Mineworkers. In September 1948 yet another organisation was founded to press for recognition and higher wages. This was the Colliery Winders'
Winders' Federation of Great Britain. The National Coal Board, however, was adamant in its refusal to recognise winding enginemen outside the National Union of Mineworkers, and in 1949 the Federation threatened to strike. This led to the intervention of the Ministry of Labour and National Service, and the strike threat was withdrawn. Further meetings with the National Union of Mineworkers led to no compromise solution, and in July 1949 the Colliery Winders Federation of Great Britain reported to the Minister of Labour that there was a dispute between them and the National Coal Board. They claimed, among other matters, an increase to 35/- a shift. The dispute was referred to the National Arbitration Tribunal which endorsed the previous finding of the Court of Enquiry that the enginemen should be covered by conciliation machinery set up between the National Union of Mineworkers and the National Coal Board. They went on to point out, however, that as the winding enginemen contended that the decision of the coal industry's National Reference Tribunal on their claim for higher wages had been prejudiced by the way the case had been put, the National Reference Tribunal should again consider the claim, bearing in mind the recommendation the earlier Court of Enquiry about the need for special arrangements within the National Union of Mineworkers for protecting the winding enginemen's interests and securing their confidence in the conduct by the National Union of Mineworkers of wage negotiations.

In March 1950 the National Reference Tribunal ruled that the only questions which they could consider under the industrial conciliation machinery were disputes between the two parties to the agreement, i.e., the National Coal Board and the National Union of Mineworkers. The Federation pressed their claim, however, and the Minister of Labour referred it to the National Arbitration Tribunal who recommended, as before, that the National Coal Board and the National Union of Mineworkers should refer it to their own Tribunal. There seemed to be no hope of a settlement in this way unless the Union and the Federation could first settle their differences and the Union had a further meeting with the Federation. Nothing came of this and the National Arbitration Tribunal again considered the Federation's claim. The Tribunal ruled that they had no option but to regard the wage rates of winding enginemen as established by the award of the National Reference Tribunal in June 1948.

Accordingly they found that the Federation's present claim had not been established. The Tribunal added that the difficulties between the Federation and the Union ought to be settled as quickly as possible, and recommended that the discussions which had taken place between the two bodies should be resumed.
at once. In 1951 the Federation and the National Union of Mineworkers reached agreement, the members of the Federation being absorbed into the National Union of Mineworkers.

In Scotland the interests of these workers have been protected by the Scottish Colliery Enginemen, Boilermen and Tradesmen's Association. This is now part of the National Union of Mineworkers (its official designation is National Union of Mineworkers - Group 2). Mr. Robert Smillie of the Scottish Colliery Enginemen, Boilermen and Tradesmen's Association sits on the National Union of Mineworkers executive. This union was described by a National Coal Board official as "a lackey of the National Union of Mineworkers." The official went on to say: "It has lost all its independent status, and has forfeited any respect by the National Coal Board ... its interests are neglected by the National Union of Mineworkers - there is no one strong enough to stand up to Moffat. Smillie handles questions relating to individual employees, but if it is a question of principle it is referred to Moffat ... and he treats Smillie like a schoolboy. I have even heard Moffat telling Smillie to mind his own business."

The personalities involved in these matters throw considerable light upon relations between the National Coal Board and the Scottish Colliery Enginemen, Boilermen and Tradesmen's Association. But the National Coal Board's attitude to the winding enginemen can be traced to another factor. This is the change which has occurred over recent years in the work performed by these men. The peculiar status of winding enginemen dates from the days when winding was a highly skilled and responsible task; the lives of many miners depended upon these employees. The progress of mechanisation has reduced the skill and responsibility needed for this job; the winding engineman is now little more than a glorified lift attendant, operating the cage which goes up and down automatically. Increased automaticity and safety have thus detracted from the authority and status of winding enginemen, who are now usually promoted boiler stokers. The personal opinion of many National Coal Board officials is that the job is now an unskilled one, but they dare not express it too loudly in public. A certain "aura" still surrounds the job in the eyes of the men, dating from the days when the winding enginemen stood between them and disaster. And, as one labour officer put it: "the winding enginemen's union tends to act in negotiations as though their employees possessed qualifications equal to a B.Sc. in engineering ... whereas, in fact, the only thing a winding engineman requires to know is how to pull a lever."
At Easthouses, for instance, even if the winding engineman died on the job, the cage would stop automatically ... we used to have a man of 78 doing the job in this division ... that shows you how skilled and responsible it is."

Opinions such as this about the status of winding enginemen have inevitably influenced the National Coal Board's attitude in its negotiations with this category of workers.

The National Coal Board was prepared to accept this claim as far as the deputies were concerned, but it was in a dilemma over the overmen and shotfirers. To have accepted the claim of the union on behalf of these men would have involved poaching upon the territory of the National Union of Mineworkers and its newly-affiliated body known as the National Federation of Colliery Officials and Staff. These bodies claimed that shotfirers and overmen were included in their membership.

The National Coal Board negotiated with the National Association of Colliery Overmen, Deputies and Shotfirers in 1948 over conciliation machinery to cover deputies. But the National Association of Colliery Overmen, Deputies and Shotfirers refused to consider the case of deputies alone, and wanted a parallel conciliation settlement for overmen and shotfirers. This led to a deadlock in negotiations, and disputes concerning these workers had to be discussed and settled, as they arose, upon an ad hoc basis.

The Scottish Division took the initiative, however, in going ahead with its own district arrangements, regardless of the deadlock at the national level. On 16th April 1948 an agreement was signed between the National Coal Board (Scottish Division) and the National Association of Colliery Overmen, Deputies and Shotfirers (Scottish Area) for regulating the procedure for dealing with questions affecting deputies employed at collieries in Scotland and who are members of that Association.

The agreement, which followed similar lines to the ordinary pit conciliation scheme, laid down that:

1) Any question arising between a Deputy and the Management shall be discussed at the earliest opportunity between the deputy concerned and the manager of the Colliery and, failing settlement as a result of such discussion then within fifteen days thereafter between the Delegate of the Association and the Manager.

2) Failing settlement of the question in dispute following the discussion referred to in Clause (1) the matter shall be referred for discussion to the Agent of the National Coal Board and the Agent of the National Association of Colliery Overmen, Deputies and Shotfirers and they shall meet within five days from
Overmen, Deputies and Shotfirers

Prior to nationalisation no conciliation machinery - either in Scotland or throughout Great Britain - existed for these employees.

Post-Nationalisation

After nationalisation the National Association of Colliery Overmen, Deputies and Shotfirers claimed recognition by the National Coal Board. The Board was prepared to accept this claim as far as the deputies were concerned, but it was in a dilemma over the overmen and shotfirers. To have accepted the claim of the union on behalf of these men would have involved poaching upon the territory of the National Union of Mineworkers and its newly-affiliated body known as the National Federation of Colliery Officials and Staff. These bodies claimed that shotfirers and overmen were included in their membership.

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the date of the request.

3) In the event of no agreement being reached as a result of the negotiations provided for in Clause (two) hereof the respective Agents shall make a joint report to the Joint Secretary of the Conciliation Board acting for the Divisional Board and to the Secretary of the National Association of Colliery Overmen, Deputies and Shotfirers who shall within seven days of the meeting referred to in Clause (two) arrange for a meeting between not more than six representatives of the Divisional Board and not more than six representatives of the National Association of Colliery Overmen, Deputies and Shotfirers to consider the case.

4) In the event of no agreement being reached as provided for in Clause (three), the matter shall be referred for decision to an Umpire appointed in terms of the Pit Conciliation Scheme dated 1st January 1947. His decision shall be accepted by the parties as final and binding.

A similar agreement was signed on 26th March 1948 between the Scottish Division of the National Coal Board on the one hand and the National Union of Mineworkers and the National Association of Colliery Overmen, Deputies and Shotfirers on the other in respect of overmen. The only difference was that provision was made for action to be taken through either the National Union of Mineworkers or the National Association of Colliery Overmen, Deputies and Shotfirers, according to which union the oversman was affiliated. Clause (three), for instance, provided that:

(a) In cases where the Oversman concerned is a member of the National Union of Mineworkers the respective Agents shall make a joint report to the secretaries of the Conciliation Board who shall within seven days of the meeting referred to in Clause (two) (analogous to Clause (two) of the Deputies' agreement) arrange for a meeting between not more than five representatives of the Divisional Board and not more than five representatives of the Scottish Executive of the National Union of Mineworkers to consider the case.

(b) In cases where the Oversman concerned is a member of the National Association of Colliery Overmen, Deputies and Shotfirers, the respective agents shall make a joint report to the Secretaries of the Conciliation Board acting for the Divisional Board and to the Secretary of the National Association of Colliery Overmen, Deputies and Shotfirers who shall within seven days of the meeting referred to in Clause (two) arrange for a meeting between not more than six Representatives of the Divisional Board and not more than six Representatives of the National Association of Colliery Overmen, Deputies and Shotfirers to consider/
consider the case.

It will be observed that in the case of overmen who are members of the National Union of Mineworkers the ordinary pit and district conciliation procedure is followed, whereas overmen in the National Association of Colliery Overmen, Deputies and Shotfirers must refer their case, in the first place, through the Divisional Board's secretary on the District Conciliation Board, there being no National Association of Colliery Overmen, Deputies and Shotfirers secretary represented at that level. There seems no reason why the National Union of Mineworkers should have five, and the National Association of Colliery Overmen, Deputies and Shotfirers six, representatives under this conciliation procedure unless it represents the determination of the newer union not to ape the procedure followed by its big brother, the National Union of Mineworkers.

The National Association of Colliery Overmen, Deputies and Shotfirers in Scotland has endeavoured unsuccessfully to exclude the National Union of Mineworkers from representing overmen. They point out that only 32 out of several thousand oversmen are members of the National Union of Mineworkers. In spite of their protests the National Coal Board has granted full equal tripartite representation to the National Union of Mineworkers as far as oversmen are concerned.

It is interesting to note the contrast, however, in relations in the Scottish Division between the National Coal Board and the National Union of Mineworkers on the one hand, and the National Coal Board and the National Association of Colliery Overmen, Deputies and Shotfirers on the other. Relations with the National Union of Mineworkers are largely formal; the negotiating machinery is implemented to the letter, and each side will use all the constitutional devices within its power to gain the advantage. As one National Coal Board officer put it; "The instinctive reaction to a National Union of Mineworkers' claim, as presented by Mr. Moffat, is 'resist it'!" On the other hand, in its relations with the National Association of Colliery Overmen, Deputies and Shotfirers, the National Coal Board has not yet used the formal Joint Disputes Committee procedure at all. The practice is for the Scottish Area General Secretary of the National Association of Colliery Overmen, Deputies and Shotfirers, Mr. Andrew MacAlpine, to make a personal approach to the National Coal Board in a pleasant and friendly fashion. "Neither of us forces the use of the proper machinery", stated the labour officer referred to above. "The National Coal Board wants to help these people, anyway. Mac-
Alpine is a sensible man who will accept a logical point made by the Board, whether it is to his advantage or not. The consequence has been that the National Association of Colliery Overmen, Deputies and Shotfirers has secured many concessions from the National Coal Board over a friendly Saturday morning chat, which might have been resisted if the issue had been forced in an aggressive manner through the formal negotiating machinery."

This observation indicates that the spirit of negotiation can be more important than the machinery, although the existence of the machinery in the background - to be resorted to if necessary - is no less essential. It must be remembered too that the National Association of Colliery Overmen, Deputies and Shotfirers represents a smaller and more highly skilled group of workers - including those with important supervisory functions - than the National Union of Mineworkers, and there is an element of self-interest in the National Coal Board's friendly and conciliatory attitude to such key workers as deputies and oversmen. But the National Coal Board has not dared to exclude the National Union of Mineworkers from all responsibility for these categories of employees, although it has scarcely concealed its preference for dealing with oversmen, for instance, through the National Association of Colliery Overmen, Deputies and Shotfirers rather than through the National Union of Mineworkers.
Non-Industrial Staffs

Formal negotiating machinery for these employees is a post-nationalisation development.

Prior to nationalisation the industry had a non-industrial staff of about 31,000 administrative, professional and clerical workers, including colliery managers, under-managers, and surveyors. This figure included the directors of colliery companies. The number rose to 34,000 in 1947; 38,000 in 1948; 38,800 in 1949; 39,000 in 1950 and 40,400 in 1951.¹

The National Coal Board's justification of this steady increase is that whereas formerly the coal industry made use of consultants or specialist advisers such as mining engineers, surveyors, architects, solicitors and doctors, since nationalisation the National Coal Board has employed a staff of its own to perform these duties. Thus, for instance, the National Coal Board marketing staff do work formerly done by sales agencies; the Board carries its own insurance; work previously done by private accountants has been taken over; and many bodies not directly employed by colliery companies - for example, the Sheffield Mechanisation Centre, the Coal Survey, and the Rescue Stations - have become part of the National Coal Board organisation. Many members of the staff, of the Miners Welfare Commission, were also transferred to the Board.

The welding of all these categories of non-industrial workers into a single large organisation like the National Coal Board provided the impetus for new negotiating machinery. Hitherto these employees had served hundreds of private colliery companies, large and small, prosperous and unprofitable, and naturally there had been very wide variations in conditions of service and pay. The situation was very different from that of mineworkers, where the progress had been - particularly since the Porter Award - towards some degree of standardisation.

With regard to non-industrial workers of management level, no trade union for these employees existed before 1947. There had been a professional body known as the National Association of Colliery Managers, but it had not been concerned with negotiations (indeed, its Charter forbade the Association to negotiate conditions of employment) and its membership had been restricted to those qualified as colliery managers. A new organisation - the British Association of Colliery Management - was consequently set up in 1947, and it was registered as a trade union aiming to represent all management staff in the industry.

The National Coal Board was cautious, however, in the degree of recognition it/¹

it afforded to this new union. It accepted its claim to represent colliery managers and other technical staff (including undermanagers), and in 1948 it set up conciliation machinery on parallel lines to that in operation for mine-workers. The British Association of Colliery Managers pressed its claims to represent other managerial, administrative and professional staffs. The National Coal Board was reluctant to accept this claim as the status of some of these employees was not clearly of undermanager level, but it finally gave way. It agreed that if no other union challenged the right of the British Association of Colliery Managers to represent these employees, it would be dealt with automatically by the conciliation machinery set up to negotiate with British Association of Colliery Managers members.

The British Association of Colliery Managers claimed the right to represent certain grades of labour officer, and the National Coal Board accepted their demand in 1949. In January 1951, however, it withdrew recognition, on the grounds that the Association no longer had the membership to justify it. The British Association of Colliery Managers contested the National Coal Board's action, and the matter was referred to the Ministry of Labour. The question was referred by the Ministry to the National Reference Tribunal in December 1951.

Not all employees of the grade concerned desired to be represented by the British Association of Colliery Managers. These employees were architects, technologists and engineering draughtsmen, and they were members of three independent unions, the Association of Building Technicians, the Association of Scientific Workers, and the Association of Engineering and Shipbuilding Draughtsmen. Hitherto the National Coal Board had negotiated informally with these groups. The National Coal Board finally decided to afford joint recognition with the British Association of Colliery Managers to these three unions, but no formal negotiating machinery was established, and conciliation continued to take place upon an informal basis.

With regard to clerical workers the National Coal Board was anxious immediately after nationalisation to bring them all under some convenient negotiating machinery. In 1946 the National Coal Board approached the Trades Union Congress and asked this body to recommend which organisations should be given facilities for organising clerical workers in the employment of the National Coal Board at its various "formation" levels, Headquarters, Division and Area. The Trades Union Congress suggested that the Clerical and Administrative/
Administrative Workers' Union would be the most suitable organisation for Headquarters, and the National Association of Clerical and Supervisory Staffs for clerical staff at Divisional level. The National Coal Board accordingly gave facilities to the two unions. It informed that they would be recognised for negotiating purposes when they had enough members among the National Coal Board's staff. Recognition duly followed, the Clerical and Administrative Workers' Union in 1948 and the National Association of Clerical and Supervisory Staffs in 1949.

There still remained the problem of what to do about the clerks at area level. The Trades Union Congress had made no recommendation upon this matter, and two rival unions were claiming the right to represent these employees. One was the Clerical and Administrative Workers' Union and the other the National Union of Mineworkers (Group 3). For a time the National Coal Board carried on separate negotiations with these unions, and identical agreements with regard to pay and conditions of service were signed in February 1948, between the National Coal Board and each of the unions. It was not until 1951 that an agreement as to the settlement of disputes was signed by the National Coal Board, the Clerical and Administrative Workers' Union, the National Association of Clerical and Supervisory Staffs, and the National Union of Mineworkers (Group 3).
CHAPTER V

Consultation and Consultative Machinery

In view of the degrading position occupied by miners in Scotland until the mid-nineteenth century it might be assumed that no machinery could possibly have existed for giving miners a voice in the running of the undertaking. While it is true that relations between the colliery manager and workers were restricted largely to the giving and taking of orders, there seems to have been an incipient form of "self-government" below ground, insofar as work was regulated by the men themselves.\(^1\)

As early as the beginning of the nineteenth century, at Newbattle Colliery, regulations were in force (entered in the colliery books at the instigation of the men themselves) which made the following provisions:

1st) It is agreed among the men that all disputes and controversies a rising in the pit bottom shall be decided by 2 men who shall be chosen as committees, whose determination shall be final and binding on all parties.

2nd) It is agreed that every Birer (female coal-bearer) shall keep her own border or lair. Whoever shall intrude on her neighbour's property, so as arise any disturbance, the committees shall be sent for, & the man or woman that is found in the wrong shall be fined of 1s. for every transgression of this kind not to be forgiven.

3rd) Be it likewise agreed that every man shall have his own fair and regular turn of tubs riding; and if any man or woman shall take her neighbour's turn by force or fraud or strength against her neighbour, will the person that took her lost the tub sent up, it not being her own fair turn.

4th) But as the coal is so variable in its nature that some may have coals in the morning, others not till afternoon, them that has them in morning must set them away for to serve the sail; but when her neighbour who was behind in the morning and gets his coal through the day he must get up his turns that he was behind.

5th) As it is a prevailing custom among Biers to curse and swear, and call others vile and scandles reproachful names without a cause, the person so offending shall be find of 1s starting for every offence of this kind not to be forgiven.

6th) And if it can be proven that the pit bottom man does not pay due attention to/

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to these regulations, through fear of sume and through favor to others, he shall be find of - starling; and he is not keep the gen (gin horse) stabled upon any account.

7th) It is agreed that if any collier or Birer shall Break any of the above regulations, and rise a desturbance to that degrie of passion that the Lift ther hand and strik ther neibhour with ther hand, or foot, or stick, or ston, or coal, or any other thing that can hit or egure one another, the person so offending shall pay 5/- of a fine not to be forgiven; and, lastly, all those fines to be lifted from the coal greve by the commities on that day the offence is commited, and to be kept of the offending person on ther pay day."

It will be observed that the Newbattle Colliery was anticipating by over a century the recommendation of the Whitley Reports that employees should be given "a wider interest in and greater responsibility for the conditions in which their work is performed."

But for consultation in its wider sense the coal mining industry had to wait many years. Questions of discipline and conduct as between management and workpeople, for instance, could only be settled ad hoc; indeed, it was only after the rise of the local trade union to challenge management on these issues that the possibility of discussion could arise. The miners in Midlothian were organising themselves into local organisations, as we have seen, just before the time of the 1842 Commission. The trend towards larger associations later in the century was important in its repercussions upon wage negotiations, but for day-to-day grievances the work of the local lodge remained strategically pre-eminent. The colliery formed the most natural unit of organisation in this sphere. Not only did the men live in the same locality, but disputes of the kind which a later age was to place in the category of "consultation" were naturally with one employer. Insofar as a mine might employ several hundreds of men the physical condition of employment favoured strong union organisation at the level of the individual undertaking. This organisation compared favourably with that of such occupations as printers or carpenters where one branch would have to deal with a large number of small employers, and where the members were scattered throughout a number of small workshops where the conditions of work differed widely. The committee of the miners' lodge would be responsible for looking after the men's interests, and arranging terms and conditions of working. A dispute over discipline, for instance, might lead to a general meeting of the men to decide upon a course of action, and their elected representatives (or, at a later date, paid officials) would approach the/
With regard to production — improvements in methods and organisation of work — such questions were not assumed to concern the employees in any long-term sense, although suggestions not involving undue expenditure might be considered. The views of two old Arniston miners upon this point are interesting. One miner stated to me that management never spent as much as it might have done on mechanisation; the other stated that, in his view, his comrades were "too conservative", and the manager had to fight to get them to accept mechanisation. These two statements are not as contradictory as they at first appear. The first miner was thinking of technical improvements to make the work of the miner less arduous and disagreeable, a consideration which properly belongs to the field of consultation. Had proper consultative machinery existed between the wars there might have been less bitterness on this point. The second miner was thinking of the fear of miners of a fall in remuneration consequent upon mechanisation, a consideration which properly belongs to the field of negotiation and negotiating machinery. This fear, as we shall see, by no means ended with the demise of private ownership.

Although, surveying the period up to the end of the First World War, there seems little doubt that management was unwilling to concede any formal consultative machinery to the workers (a reflection of the general climate of opinion in the early years of this century, rather than evidence of characteristics peculiar to the coal mining industry) there were a number of questions, directly affecting the interests of the workers, in the regulation of which their representatives had a voice. This participation rested largely upon the basis of statutory rights.

The first statutory right (in time, and perhaps also in importance) was the right to elect checkweighers to protect the interests of pieceworkers with respect to the payment for coal hewed. The famous Scottish Miners' leader, Alexander MacDonald, played a prominent part in securing this right. MacDonald waged incessant war throughout the 1850's against the arbitrary confiscation of the miners' pay for any tubs which were declared to be improperly filled. It was the practice of less scrupulous coal-owners to condemn a considerable percentage of the men's tubs, thereby escaping payment for part of the coal hewn. The miner, working far below ground, was absolutely dependent upon the honesty of the employer's agent in recording his output. The miners began to demand the presence of their own representative at the pit-bank, to check the weight, and MacDonald secured the insertion into the Coal Mines Regulation/
Regulation Act of 1860 of a clause empowering the miners of each pit to appoint a checkweigher. But by confining their choice to persons actually in employment at their own pit the Act made it possible for coal-owners to victimise (and even dismiss) the men's agent. Where the miners could not be terrified into foregoing their right to appoint a checkweigher, his work was often hampered by refusing him close access to the weighing machine, or by fencing up the weights so that he could not see them. The position of checkweighmen was placed on a firmer basis, however, in the Coal Mines Regulation Act of 1887. Previous legislation had given the men power to appoint a check-weigher at their own expense, the contribution of miners being optional. The 1887 Act gave power to any checkweigher appointed by a majority of the workmen in any pit (i.e., pieceworkers) who were paid according to output, to recover from every such workman the due proportion of his wages as checkweigher. The appointment was by ballot, and the Act allowed for colliery companies to deduct each miner's contribution at the company office, a practice that became fairly general. A workman's committee (usually the lodge committee) supervised the election and fixed remuneration.

Under the Coal Mines Act of 1911, any workman who alleged incompetence, gross negligence or misconduct, against a colliery manager or under-manager, had the right to report the matter to the Secretary for Mines who could then hold a public inquiry into the allegation. This Act also provided that workers should be represented on an equal footing with the owners and managers on the Board which regulated the examinations for mining certificates of competency. Furthermore, workmen employed in a mine had the right of appointing two of their number to inspect the mine once at least in each month, and report on their inspection, which was to be forwarded to the Mines Inspector. Another provision of the 1911 Act stipulated that if a majority of the workmen employed in a mine were of the opinion that the general regulations enforced in respect to it, or the special regulations, ought to be altered or modified, the Secretary for Mines was under an obligation to consider their suggestions and to take such action as, after inquiry, seemed desirable.

Apart from this legislation which specified the right of the workers to participate in the regulation of matters affecting their interests, there was a growing volume of legislation upon such matters as accident prevention, education and training, ventilation, signalling arrangements, safety lamps, rescue/

rescue apparatus, explosives, inspection, apart from the Acts relating to hours and conditions of work. This legislation provided a "floor" to consultation, had the will existed to take advantage of it. Many questions which in other industries would have been settled only by protracted bargaining and discussion were covered by law in the coal-mining industry, and the problems of consultation would have been largely problems of interpretation. In other words they would have involved the definition of "rights" rather than the determination of "interests" - the only useful basis for successful consultation.

An impetus to improved relations between employers and workers was given by the Whitley Report and the two Ministry of Labour Reports which followed in 1918 and 1919 upon the constitution, establishment and functions of works committees.

The Whitley Reports recommended the establishment of national and district councils with functions wider than the hitherto accepted bases of collective bargaining. In the light of wartime experiences it advocated the setting up of works committees representative of the management and workers to settle "many questions closely affecting daily life and comfort in, and the success of, the business, and affecting in no small degree efficiency of working, which are peculiar to the individual workshop or factory."

The systematic organisation proposed by the Whitley Committee for national and district joint councils, closely linked with works committees, was never realised, although its recommendations were partially implemented in some industries, including Gas and Electricity Supply. The impact of "Whitleyism" on these industries is examined in Part II and Part III of this thesis. As far as the coal mining industry was concerned, however, the existing machinery for negotiation was merely adapted to include consultative functions. The Mining Industry Act of 1920 did, it is true, provide for a pit committee at every coal mine, but this proposal eventually lapsed. Part II of the Act made provision for a committee at every pit where a majority of the workers balloted in favour of such a step. In addition there was to be a district committee in each district, and certain districts were to be grouped in areas, each of which was to have its joint board. There was also to be a national board representative of the whole industry. The functions of the pit committee were concerned with discussing and making recommendations with respect to the safety, health and welfare of the workers, the maintenance and increase of output/
output, disputes relating to wages and other matters, and certain minor subjects. It will be noted that these functions extended beyond the scope recommended in the Whitley Reports. The Act did not, however, provide for mandatory force to be given to the decisions of pit committees, and in the event of the pit committee failing to reach agreement there was no new channel for taking the matter to a higher level. The already existing employer-trade union relationship was presumably regarded as adequate to take up the matter on traditional lines, if the pit committee broke down upon any issue. The 1920 Act provided that if at the expiration of one year (which ended on 16th August 1921) the scheme had been rendered abortive through the failure of those entitled to do so to appoint representatives to the various boards and committees, that part of the Act should lapse, unless expressly renewed by Parliament.

Both the employers and the miners vacillated in their attitude to the Act. The miners were indignant that the Sankey proposals for nationalisation had not been implemented, and were hostile to an Act which was, to them, a retreat from full workers' control. By August, 1921, however, the Miners' Federation realised that half a loaf was better than none, and declared their support a few days before the Act was due to expire. But it was now the turn of the owners to be disdainful. Although they had previously supported the Act, they now declared themselves unwilling to co-operate. Parliament took no action to extend the period, and Part II of the Act lapsed accordingly.

The Samuel Commission in 1925 declared itself in favour of voluntary rather than statutory machinery at the national and district level: "The result is more likely to suit the needs of the case, and to promote a friendly spirit in the working, than the compulsion of an Act of Parliament and the rigidity of departmental regulations ... There are already, throughout almost the whole of the country, long-established joint boards in the districts; and the central committees of the employers' and the miners' organisations have been accustomed for some years to discuss together questions of common interest. We see no reason to suggest any interference with this machinery, the spontaneous creation of the industry itself." ¹

It will be noted that negotiating and consultative functions are not clearly distinguished from each other. But although the Samuel Commission shed no tears over the demise of the statutory provisions for district and national/

national machinery it recognised the need for positive action at the pit level: "We have reason to think that such mutual hostility as there is between the central bodies is not a true reflection of the spirit that prevails in the country at large. We were impressed by the fact that, during the visits which we were ourselves able to make to the coalfields, we heard at every mine we visited, almost without exception, expressions on the part of the managers of a sincere feeling of goodwill and of respect for their employees, and a recognition of the essential reasonableness, as a general rule, of the agents who had been chosen to represent them. Nor did we find on the part of the men's representatives any different attitude to the managers."¹

In the light of this, the Samuel Commission felt that there was a need to strengthen consultation at the pit level, even - if necessary - by statutory means.² The Commission reiterated the Whitley findings that workers could thereby assist the management in many practical details with respect to which they were expert, thereby increasing production.

In view of future developments in consultative machinery in the coal mining industry, particularly in the post-nationalisation era, let us pause to examine in detail exactly what hopes the Samuel Commission entertained upon this matter. Later on we shall see how far promise was matched by performance.

"Pit Committees," declared the Samuel Report, "would go far to removing the sense of exclusion, which undoubtedly is one of the principal grievances that cause discontent and unrest in the minds of the workers. Among the miners there is a strong corporate spirit, stronger perhaps than among any other class of workpeople. This is due partly to the conditions of their work, which involve a very large degree of mutual dependence and helpfulness, often in circumstances of danger; and partly to the fact that the locality in which their work has to be carried involves, as a rule, the growth of separate villages for the workers; they therefore form a homogeneous community and have the fullest opportunities for common action. This corporate spirit, rightly directed, has been in the past, and may be in the future, of great benefit to the industry as a whole. We consider that the machinery proposed would provide it with a suitable method of application ... It is thought by some that the pit committees would be a centre of friction, and that they are more likely to be a source of illwill than of mutual understanding. We do not believe that this need be the case if they are tactfully handled by the mine managers; and we regard a capacity to work on good terms with the other members/

members of a joint committee as one of the principal qualifications for a position involving industrial relationship with a large body of men.

It is sometimes suggested, again, that the system would lend itself to the assumption by the committees of the functions of management, that the responsibility of the manager would be fatally weakened, and that he would be left in a position in which he would be unable to fulfil the duties, laid upon him by Statute, for securing the safety and proper workings of the mine.\(^1\)

Replying to this criticism the Samuel Report pointed out that in the first place the regulations made under the old 1920 Act had stipulated that the responsibility of the manager should not be impaired, and that such a guarantee could be inserted in any new statute. This principle had indeed been accepted by the Miners' Federation.\(^2\)

"In the second place", continued the Report, "the functions that would devolve upon the committees were defined in the (1920) Act, and there would be no authority to pass beyond them. We consider that cases of discipline should not be subject to their review, and we understand that this was the intention of the Act. The maintenance of discipline is essential to safety and to good management, and our recommendations are not intended to detract in any way from the authority of the manager in that matter. Thirdly, it was provided in the Act that no recommendations of the committees were to have validity unless a majority of each of the sides represented concurred in them. In these circumstances we feel convinced that the danger of the proposed machinery being diverted from its proper use is a slight one, and that the risk is well worth incurring in view of the large advantages to be gained.\(^3\)

It was suggested, however, that regulations for putting the machinery into operation should allow as much elasticity as possible, and that questions should be left to be settled so far as possible by the industry itself. It would perhaps be advisable to submit the regulations, when drafted to the Advisory Committee of the Mines Department, which consisted of representatives from all sides of the industry.\(^4\). The Samuel Report was referring here to the Advisory Committee which had been set up under Part I of the 1920 Act (which remained operative) to co-operate with the recently created Mines Department of the Board of Trade. Among its members were four representatives of coal mine workers, and three representatives of workers in other industries. This Advisory Committee was, in fact, an incipient consultative council on a national level.

The/
The Samuel recommendations with regard to pit consultative machinery were embodied in the Mining Industry Act of 1926. Under Section 21 it was decreed that:

1) If at any time after the expiration of two years from the commencement of this Act the Board of Trade are satisfied upon representation made to them as respects any coal mine (not being a small mine within the meaning of the Coal Mines Act, 1911) that no adequate opportunity has been afforded by the owner, agent and manager of the mine for the establishment of machinery for mutual discussion between representatives of workers employed in or about the mine, of matters of common interest in regard to the working of the mine, the Board may by order direct that regulations under this section shall apply to that mine.

2) The Board of Trade may make regulations providing for the constitution of a joint committee for any mine to which the regulations apply, consisting of representatives of the owners and management of the mine, and having such functions as may be prescribed by the regulations.

3) Regulations made under this section shall provide for the procedure and meetings of joint committees and for enabling joint committees to obtain such information and to cause such inspections to be made as may be necessary for the purpose of enabling them to exercise any of their functions under the regulations."

This particular section of the 1926 Act suffered the same fate as the section relating to amalgamations; it had no effective results, and was virtually ignored.

The next legislative attempt to improve industrial relations in the coal mining industry came in 1930. The machinery set up under Part iv of the 1930 Act might well have developed useful consultative functions, but its failure, as already described (see page 98) was as complete as that of the 1926 Act. The setting up of the Joint Standing Consultative Committee after the 1935 strike, in January 1936, as part of the settlement of a claim by the Mineworkers' Federation for an increase in wages, was a more auspicious step. Its concentration upon consultative matters such as welfare was regarded by the miners, however, as inadequate; their aim was to use the Committee for conciliation purposes. The suspicion with which they regarded the committee is confirmation of the folly of placing both consultative and conciliation functions/

functions (even if only nominally) under the aegis of a single committee. Welfare concessions to the miners, however real, were only regarded as second best, and a poor substitute for concessions in respect of pay and hours of work. A more serious defect in the 1936 Committee was that it made no provision for consultation at lower level, either at the district or in the mine. It was not until after the outbreak of war that joint consultation was properly introduced into the coal mining industry.

The pit production committees of the Second World War marked a decisive step forward to joint consultation at the undertaking level. The responsibility of these committees (upwards and downwards) changed from time to time throughout the war period. A chronological survey is perhaps the simplest means of disentangling their various functions, and throwing these changes into relief.

Our story starts with the setting up on the Coal Production Committee in April 1940. This body possessed no compulsory powers; such powers as existed were wielded by the Mines Department. It consisted of representatives of owners and miners together with officials of the Mines Department, and its task was to discuss methods of increasing output. Its first chairman was Lord Portal, and he began his task by touring the coalfields in April 1940 to urge the setting up of production committees at the district and pit levels. Liaison officers known as Coal Production Advisers were appointed to form a link between the Council and the districts. The Adviser for Scotland, appointed in June 1940, was Sir Nigel Campbell.

The Coal Production Council, in 1941, asked each District Production Committee to suggest steps to increase output. Each district was given a target at which to aim, and it was asked to submit comments upon the level of the target and suggestions for sub-dividing it among the individual pits. This request revealed that, in spite of widespread exhortation and publicity, many of the pit committees set up at Lord Portal’s instigation had already lapsed, and fresh energies were devoted to reviving them.

On 15th May 1941 the Essential Work (Coalmining Industry) Order was announced. With regard to the role of the pit production committees, two important effects should be noted. First, the order made coal mines scheduled undertakings in which employment could not be terminated nor a man leave his employment without the consent of the National Service Officer. The National Service Officer’s decision was subject to appeal to the Local Appeal Boards, representing/
representing employers and employed, with an independent chairman set up by the Minister of Labour.

Second, the undertaking might report persistent absenteeism to the National Service Officer. After consulting the District or Pit Production Committee, the officer would deal with the absentee, if necessary, by the issue of directions. These directions were subject to an appeal by the absentee to the Local Appeals Board. The power of pit production committees over absentees was increased by an amendment to the Order on 9th December 1941. Henceforth the management and committees were required to report in writing to the National Service Officer that an employee was guilty of absenteeism, and after four days, the Officer issued directions. The onus was upon the absentee to defend himself before these directions were issued. The practice was now for the pit production committee to make recommendations to the National Service Officer in respect of an offender, and carry out the directions which he issued.

But in another respect, the Essential Works Order loosened pit discipline. It was no longer possible for the management to dismiss a man except for gross misconduct.

Thus the State came to play the part of a third party in the running of the individual mine, as well as at a national level. The State was not the actual employer of the miner, neither had it assumed operational control of the pits. But in making engagements and dismissals subject to its consent, it took out of the hands of management some of the most important decisions of an employer. These powers were now shared uneasily with the workers (through the machinery of the pit production committee) and with the State.

The increased powers given to Pit Production Powers in December 1941 were, however, largely negative in character. Although absenteeism was related to production in a very direct and unequivocal fashion, it was hardly in the spirit of "Whitleyism" to make these committees little more than tribunals for disciplining lazy employees. The channels of communication from pit committee to District Production Committee to the Coal Production Committee were occupied by the transmission of lists of fines imposed, and details of decisions given by National Service Officers.

The role of pit production committees was reviewed by the Select Committee on National Expenditure in 1942.2

"There/

"There is growing co-operation in the work of the pit production committees. Some of these committees have discussed any subject which the men think could improve production. Your Committee consider it desirable, however, that these committees should confine their attention strictly to production problems... Questions of wages and working conditions should be dealt with by the normal machinery, and preferably out of working hours. The problems which confront the pit production committees are sufficiently varied."

Commenting upon the machinery for dealing with absenteeism, the Committee considered that it was too cumbrous. "National Service Officers had not taken a sufficiently firm line in their treatment of offenders, and through long delayed and often ineffective action they had tended to destroy the influence and authority of the pit production committees."

This recommendation was taken into account in the Government Coal Plan of 1942 which stated: "Pit production committees will continue as at present constituted to assist pit managers to secure maximum output. They will be relieved of all responsibility for dealing with individual cases of absenteeism and will thus be free to devote their full attention to matters associated with production." An amendment to the Essential Works Order (7th September 1942) made absenteeism a direct offence and provided that offenders should henceforth be reported by the new regional investigation officers of the Ministry of Fuel and Power, instead of by the pit production committee. These officers dealt with cases of absenteeism reported to them by the colliery management, and attempted first by persuasion to secure improved attendance by the offender. They would interview him, and later, if necessary, send him warning letters. If these measures failed they would report the matter to the National Service Officer, who would then prosecute.

The 1942 changes in the functions of the pit committee were part of the general reorganisation of the coal mining industry which took place in that year. Let us examine these changes insofar as they affected consultation and consultative machinery.

On 11th June 1942 the new Ministry of Fuel and Power came into being, and the Mines Department passed into oblivion. The Mines Department had not been conspicuously successful in the field of industrial relations. Indeed its help had never been very enthusiastically solicited by either owners or miners, and beyond the compilation of some very useful statistics it had done little practical good. The new Ministry could look forward to more success; a climate of/

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1. Cmd. 6364 "Coal"
of opinion favourable to (or at least resigned to) increased state intervention; the cautious goodwill of both sides of the industry\(^1\) and a sense of national emergency which militated against self-interested criticism.

Consultation now became the concern of three bodies; the National Coal Board (an advisory body); the Minister of Fuel and Power and his regional control organisation; and the Pit Production Committee (henceforth sponsored and fostered by the Pit Relations Division of the Ministry).

The National Coal Board (not to be confused with its more famous successor) was set up to advise the Minister upon such matters as the planning of production, efficiency, supplies, manpower and all matters affecting the health and safety of the worker. Excluded from its province were all conciliation matters. The Board met under the chairmanship of the Minister, and consisted of the Controller-General (Vice-chairman), the vice-chairman of the eight regional coal boards (one representing the managers and one representing the workers), managerial and technical representatives, and representatives of the distributive trades and consumers. Officers of the Ministry attended their meetings which took place quarterly. It will be noted that the Board was larger and more miscellaneous than the Coal Production Council which it replaced. But its influence was far less insofar as a brand new Ministry had arisen to deal with most of the problems of the industry through its own machinery. The fact that more work had been thrust upon the old Coal Production Council was to some extent a recognition of the limitations of the Mines department. The new Ministry of Fuel and Power did not suffer from these limitations, and its eager assumption and exercise of extensive jurisdiction seems to have left its new advisory body - the National Coal Board - very much on the fringe of things. Six sub-committees (also meeting quarterly) were, however, set up by the Board. One of these was concerned with manpower, and another with welfare, health and safety.

In addition to the National Board there was a regional board in each of the eight regions, appointed by the Minister to advise the Regional Controller. These boards, which met monthly, consisted of coal owners, miners, and technical staffs. Although these boards were linked to the National Board through their vice-chairman it seems to be the opinion of those formerly connected with them that they played a more valuable part through their contacts "in the field", with regional problems, rather than their contacts "upwards". Indeed, the National Board seems to have been regarded as an article of adornment rather than of use.
Turning to the new Ministry we find an elaborate organisation with far wider powers than any hitherto exercised over the coal mining industry. The Minister enjoyed full control in law over the operation of all coal mines, in the allocation of the coal raised, and in the exercise of this control with a view to ensuring maximum production for wartime needs.\(^1\) The post of Controller-General was created, the first holder of this office being Lord Hyndley. He was directly responsible to the Minister, and was assisted by four directors (production, labour, services, and finance). The Controller-General was represented in the regions by each of his Regional Controllers who had "full and undivided responsibility for the policy and general conduct of mining operations" in their regions.\(^2\) The Regional Controller could supersede or remove managements, transfer men from one pit to another (in conjunction with the Ministry of Labour and National Service), or through his nominee at the individual colliery (see page 7) direct an undertaking to conduct its operations in such a way as to contribute most effectively to the output of coal. The Regional Controller's directions to the colliery company had the force of law, apart from the manager's statutory obligations respecting the safety of the pit. Three out of the four national directorates were represented at the Regional level; thus, in addition to his production and services director, the Regional Controller was assisted by a Regional Labour Director. This officer's special concern was the pit production committees, whose meetings he would frequently attend. All minutes of these committees were sent to the Labour Director. These officials were recruited from the trade unions and from management. As we shall see later, they formed the nucleus of the labour relations machinery established under nationalisation, not with altogether happy consequences.

The Pit Relations Division of the Ministry of Fuel and Power was set up to bring the miner into closer contact not only with the management and problems of his own industry but also with the general public. It was an attempt to break down the "exclusiveness" of the miners and remind them of their responsibilities to the community, as well as of the community's responsibility to them. A large part of the Division's work was propagandist, e.g., to convince the miner of the national need for greater output, and as such was regarded with suspicion by the men. Not only do miners seem more suspicious than factory workers of such activities as films, broadcasts, exhibitions, and displays/

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2. Ibid. " 16(e).
displays, but the average colliery does not offer the same facilities as a factory (as, for instance, in the canteen) for the holding of such activities, nor are there such advantageous places to display notices and posters.

Perhaps the most useful work of the Pit Relations Division was the fostering of pit production committees. A much more positive emphasis was given to the role of these committees. Reports were henceforth to be sent by the committees to the new Regional Controller in place of the old district committee - in other words, recommendations were submitted direct to an official with power to implement them. The Ministry recommended a constitution, a model agenda and a report form. Questions could be referred to the Regional Controller singly by either side of the pit production committee, or jointly, or the regional controller could take them up directly in virtue of his receipt of the minutes of all committees in his region. Apart from the submission of minutes, committees had to submit fortnightly reports showing such items as output (reasons for failing to achieve target, and measures taken to remedy this), use of manpower, and absenteeism (number of shifts which could have been worked compared with number of shifts actually worked).

The management's representatives on the committee usually consisted of the manager, under-manager, foreman, fireman and chief engineer, and the men elected an equal number of representatives at their trade union lodge meetings. This latter procedure was contrary to the "Whitley" recommendations, and it is questionable whether orthodox trade union officials (in practice nearly all representatives were officials) were suitable for committees of this kind. As these committees usually met in the evening, however, in the men's time, it was difficult to get anyone but an official to attend. It seems to have been the practice to report upon the work of the committees to the trade union lodge meetings. This meant that only active union members who attended regularly knew what was going on.

Nevertheless there were many matters upon which workers could make suggestions to improve production. There were such questions as examination and maintenance of haulage roads and return airways, defects in machinery, methods of cutting and shot-firing, the stowing and packing of rubbish, improvements to surface lighting, and the introduction of man-riding facilities underground, where possible. Sometimes more general questions of policy, like the closing down of uneconomic seams, were discussed.

The views of men connected with these committees (both miners' and management representatives), as expressed to me, have been without exception critical.
critical. Management representatives tended to be more aggressively critical, while the men tended to regard the committees largely as "window-dressing." Criticisms representative of the two viewpoints are worth noting. In the words of one official of the Lothians Area- National Coal Board - who had been chairman of a pit production committee during the war years: "The term 'production committee' was a complete misnomer." A Lothians miner complained that the pit manager had been far too high-handed with the committee at his pit. Both stated that the committees had done little to improve production. That experience in the Lothians was not exceptional is borne out by a pamphlet issued by the Ministry of Fuel and Power in March 1945. Addressed to Regional Controllers, it purported to give advice upon the conduct of pit production committees. It stressed the need for the lucid and detailed exposition of production plans, the need for precise agenda, and the importance of meeting the men in the spirit of consultation and not of reprimand. That such advice should be needed after five years' experience of pit committees (three of which had been spent under the regime of the Ministry of Fuel and Power) indicates that the committees were not working smoothly, and that many lessons remained to be learned.

This survey of the growth of pit production committees, important as these committees were, does not exhaust the experiments in consultation before nationalisation. Consultative machinery to deal with welfare matters was set up as early as 1920 when, under the Mining Industry Act of that year, a Miners' Welfare Fund was set up for "purposes connected with the social well-being, recreation, and conditions of living of workers in or about coal mines, and with mining education and research." The Fund was raised by the imposition of a levy of a penny a ton upon coal output. It was administered by the Miners' Welfare Committee, appointed by the Board of Trade, consisting of representatives of the Mineworkers' Federation, the Mining Association and some independent members. The income of the Fund was increased in 1927 by the levy of 1/- on coal royalties, the proceeds of this levy to be used for the provision of pithead baths and facilities for drying clothes.

The Coal Mines Act of 1911\(^1\) had provided that if, on a ballot, at least two-thirds of the workmen at any mine who were engaged in "dirty" occupations expressed themselves in favour of baths and drying rooms and undertook to pay half the cost of maintenance, the mineowner should forthwith provide such accommodation, provided that the total cost of maintenance (including interest on capital expenditure) did not exceed 3d a week for each workman liable to contribute/

contribute. This early experiment in democracy was not as impressive as might appear; the insertion of the threepenny limit made the section a dead-letter, since under post-war conditions 3d a week hardly covered the interest on the capital cost of erection alone.

An Act of 1934 reduced the output levy to 3d per ton, but it was restored to a penny under the 1939 Act. This Act replaced the Miners' Welfare Committee by a Miners' Welfare Commission (which was likewise appointed by the Board of Trade, consisting of representatives of owners, miners, royalty owners and various independent members). From 1942 onwards the Commission, in conjunction with a new Mines Medical Service, set up an accident rehabilitation service in addition to its many other welfare activities.

A detailed examination of the activities of this Fund, however, lies outside the scope of this chapter (see page 188). We are concerned here with its influence upon the development of consultative machinery. From the inception of the Fund, the Committee had worked largely through Joint District Committees (representative of the miners and owners) and local committees.

At the local level, in Arniston for instance, there is evidence of considerable participation by the miners in committees connected with welfare and recreation long before nationalisation. From 1912 onwards a Miners' Institute (including Library and Bowling Green) was run by a committee of miners. Although the Dundas family headed the subscription list, the miners continued to contribute 3d per week to its upkeep. After 1920, in addition to the Welfare Committee there were small committees of the miners and management dealing with Sport and Drama. There were also an Ambulance Committee, a Flower Show Committee, and a Gala Day Committee (the last-named being perhaps the most important in the affairs of the village in that it arranged a large annual treat for the children and wives of the miners).

In 1909 Mr. Lithgow, the manager, had started a Pipe Band (which is still in existence) and another small committee managed this.

Elections to these various committees usually took place at a meeting held in the Welfare Hall. Mr. Lithgow would take the chair, and would announce the names of two officials as management representatives. The meeting would proceed to elect miners' representatives, not without considerable prompting from Mr. Lithgow who, in the words of his widow, "knew exactly who was good at what."

Although there seems to have been a good deal of benevolent paternalism in all these affairs, both from the Dundas family and from the Colliery Manager, there was ample evidence of democratic participation by the workers. As a training/
training for joint consultation - and in the creation of a spirit of goodwill and mutual trust - these various welfare activities must surely have played a significant part in the years between the First World War and the advent of nationalisation.

Post-Nationalisation

The Coal Industry Nationalisation Act provided under Section 46(1) that "it shall be the duty of the Board to enter into consultation with organisations appearing to them to represent substantial proportions of persons in the employment of the Board, or of any class of such persons, as to the Board's concluding with those organisations agreements providing for the establishment and maintenance of joint machinery for ... (b) consultation on:- (i) questions relating to the safety, health or welfare of such persons; (ii) the organisation and conduct of the operations in which such persons are employed and other matters of mutual interest to the Board and such persons arising out of the exercise and performance by the Board of their functions.

On 27th November 1946 a National Consultative Council for the Coalmining Industry was set up under the terms of the Act to "provide a regular means of consultation" between the Board and organisations which they deemed to be suitable. The Council was to consist of twenty-seven members of whom six were to be appointed by the National Coal Board, nine by the National Union of Mineworkers, nine by the National Association of Colliery Managers and three by the National Association of Colliery Overmen, Deputies and Shotfirers. In the event of any member's inability to be present his organisation could appoint a substitute. The Chairman of the National Coal Board was to act as Chairman and the other organisations each appointed a deputy-chairman, one of whom could preside in the absence of the Chairman. The National Coal Board was responsible for the appointment of the Secretary to the Council and meetings were to be held at monthly intervals unless special meetings were required.

Article 9(b) stated:

"The opinion of the Council on all questions shall be reached as far as possible by mutual agreement and so recorded. But, so that the Board (the National Coal Board) may receive the most useful guidance from the Council, the views of individual members will also be recorded where appropriate." This clause emphasises the need in the sphere of consultation for co-operation rather than majority voting.

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The National Consultative Council is intended to study the general working of the consultative machinery, and has discussed such matters as improved mining methods, education and training, and health, and welfare and training. The Council is entitled to appoint committees from its membership for special purposes (art. 8.), and can co-opt members where necessary. It has appointed a Sub-Committee on Safety and Health (which is attended, for instance, by the Chief Inspector of Mines and various officials from the Ministry of Fuel and Power), a Sub-Committee on recruitment, education, training and welfare, and a Sub-Committee on Production.

The National Consultative Council met only at two-monthly intervals during 1947 and 1948, but it met fifteen times in 1949 and continued to meet frequently thereafter. Perhaps its most valuable work was concerned with discussions on the National Coal Board's "National Plan for Coal" which took place during 1950 and 1951, and led to the acceptance of its recommendations. The plan ("Plan for Coal", Hobart House 1951 - National Coal Board) involved the investment of £635 millions over the following fifteen years. The aim was a balanced programme of capital development, designed to increase output, improve productivity, and reduce costs, by employing men and money where they could produce the best results.

It was hardly expected that the workers would oppose the investment of £635 millions in their own industry. But the other provisions were more controversial. For instance, by 1965, it was estimated that between 350 and 400 pits would cease to exist, although 90 would be absorbed in other schemes. Not only would there be need for transfer of manpower, but it was expected that by 1965 the industry would require 80,000 fewer workers. It was expected, however, that normal "wastage" would keep the demand for labour greater than the supply.

In view of the issues involved, it was a matter for congratulation that the plan should have been endorsed by all sides of the Consultative Council. Not only did the discussions on the plan involve the workers in some degree of responsibility for its fulfilment, but they had a valuable educative role. Lengthy discussions took place, for instance, on how production possibilities were related to marketing needs so that consumers' wants could be met as cheaply as possible. Estimates of demand and price policy were discussed as:

2. Ibid. " 9.
as were such topics as manpower, capital and natural resources, wages costs, and interest rates. Members of the Consultative Council were spared none of the irksome details; how could they balance net costs, transport costs, and quality against the demands of consumers. There were discussions upon the processes of marketing. Even more important, the plan was passed down by the National Consultative Council to the Divisional, Area and Colliery consultative machinery for discussion and observations.

Since its inception the National Consultative Council has discussed a wide range of topics, including the international coal situation, loss of output through strikes, juvenile recruitment, the National Coal Board's organisation, absenteeism, housing, mechanisation, price policy, and the possibility of extending American methods in British mining. In response to an invitation from the Anglo-American Council on Productivity, the coal industry sent a productivity team to the United States of America in 1951 to study conditions in the American coal industry. The team was chosen by the National Consultative Council and visited the United States during February and March of 1951. Their report was discussed by the National Council later in 1951.

Matters referred to the Sub-Committee on Production have included wastage of manpower and the re-employment of men in and between pits. The Sub-Committee on Safety and Health has investigated the adequacy of existing safety regulations, and the remaining sub-committee has discussed the "Ladder Plan" (see page 255), the Board's Scholarship scheme, the "directed practical training of mining graduates, and part-time education of men seeking the Colliery Manager's Certificate.

The National Consultative Council decided at its second meeting that Divisional Consultative Councils should be set up as soon as possible. By July 1947 these councils were established in all Divisions, based upon a model constitution recommended by the National Council.

It is the duty of the Divisional Consultative Council to investigate and report on any matters referred to it by the National Consultative Council, and to "supervise, co-ordinate and further the activities of other coalmining consultative bodies within the Division and provide them with such information as is necessary for their proper guidance and development (art. 3). Membership consists of a chairman and nineteen other members of whom five are appointed.

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appointed by the National Coal Board, six by the National Union of Mineworkers, six by the National Association of Colliery Managers, and two by the National Association of Colliery Overmen Deputies and Shotfirers. The Divisional National Coal Board Chairman is Chairman of the Council.

The most significant work done by the Scottish Divisional Consultative Council has been concerned with the transfer of men from old to new collieries. This was merely a question of transfer to a neighbouring pit (although even this simple operation produced on occasions disagreements with the men) but in transfers much further afield, men from Lanarkshire had to migrate to the coalfields of Fife, Clackmannan and the Lothians, and to Ayr and Dumfries. The Consultative machinery helped to overcome many frictions which otherwise might well have developed into serious disputes. After discussions with the National Coal Board and the Scottish Area of the National Union of Mineworkers, the Divisional Consultative Council agreed in 1951 to accept in general terms the programme of closures worked out by the Divisional Board on the understanding that the closure of each colliery would first be discussed by its own consultative committee. The procedure is as follows:—Before any action is taken the comments and suggestions of the Colliery Consultative Committee are considered by a special Sub-Committee of the Divisional Consultative Council. The Divisional Council also agreed that, if necessary, special meetings should be called with the Members of Parliament concerned and with certain County and Burgh Councils. A scheme was worked out by the Divisional Council whereby lodging, travelling and removal allowances were paid to workers removing from the declining to the developing areas of Scotland, and the process was carried out with remarkable harmony. By the end of 1951 over 40 Scottish collieries had been closed, and 2,749 men had transferred under the scheme; 527 to Ayrshire, 121 to Alloa, 1,138 to Fife and 963 to the Lothians.

The Scottish Divisional Consultative Council has discussed most of the topics considered by the National Council, and has made recommendations upon the application of national policies to Scotland, in addition to the many local problems which have come before it. Divisional Councils were asked, in 1947, to go ahead with the formation of Area councils, and a model constitution was provided. The National Council was very emphatic about the need for these councils; it stressed that the Area was the National Coal Board's main unit of management; at its headquarters the development of a large section of a coalfield was planned, and the services which collieries need—technical, financial/

1. Approval of the N.C.B.'s plans for the large-scale reorganisation of the industry was facilitated by the introduction of a Redundancy Compensation Scheme. See appendix I(h) Page 674.
financial, commercial, etc. - were all organised at area level. For this reason the National Council told Divisional Councils to go ahead and reproduce their machinery at area level. Although it admitted that circumstances might delay the establishment of these area councils, the National Council declared that it regarded them as an essential part of the consultative scheme to be introduced when practicable.

The Scottish Division, however, has persistently refused to set up area consultative councils, although all other divisions have done so. In the opinion of a senior labour official of the National Coal Board "consultation at an area level is superfluous", and there seems good grounds for believing that such councils would add unnecessarily to the already vast accumulation of councils, committees, sub-committees and commissions which exist in the coal industry. There seems no reason why the Divisional Council should not act as the sole intermediary between the National Council and the Colliery Consultative Committee.

At the lowest level - although the most important - comes the Colliery Consultative Committee, the constitution of which is set forth by the National Consultative Committee for use in all pits. The preamble to this constitution states that "in a publicly owned Coalmining Industry the concern of management and workmen should be identical. It is expedient, therefore, to set up a consultative body at each colliery with the object of securing the closest co-operation amongst all those concerned in the operation of the colliery."

The colliery manager is chairman of the Consultative Committee and he appoints three of its members, "two of whom shall be underground officials and the other a surface official."

The mineworkers elect six members by secret ballot from nominations submitted by the National Union of Mineworkers Lodge; two of them represent the faceworkers, and the remaining four represent the other main grades of colliery workers (underground haulage workers, surface workers, checkweighmen and tradesmen). One deputy is elected by secret ballot by his fellow deputies, from nominations submitted by the Deputies' Branch. The National Coal Board's Mining Agent, the National Union of Mineworkers Area Agent, and the Colliery Lodge Secretary are ex officio members of the committee. The Committee is empowered to invite any other persons having a special knowledge of any matters under discussion to attend meetings, and colliery officers responsible for matters relating to labour, training, safety, health or welfare are required to attend when summoned by the Committee.

Members of the committee are elected for three years and one-third of their number retire each year. Workmen, other than deputies and managerial staff, who are members of the National Union of Mineworkers and have been employed at the colliery for not less than twelve consecutive months may nominate candidates for election to the colliery committee. As indicated above, the local lodge of the National Union of Mineworkers submits nominations (at least two) for each vacancy, and a ballot is then held to decide which of the selected nominees shall become members of the Committee. The actual conduct of elections is described in Appendix I(i).1

The scope of the committee is described by Section 46(1) of the Act, quoted above (see page 142). More particularly, the functions of the committee, as reiterated by the National Consultative Council, are to discuss the following matters:

1) The accident and sickness trends at the colliery, and measures for reducing them.
2) The Colliery Welfare arrangements, including the proper provision of meals, washing accommodation, sanitation, cycle sheds, safety appliances, first-aid equipment, protective clothing and footwear, possible schemes to provide a common service for laundring and boot repairs.
3) The training and educational activities associated with the colliery.
4) The technical efficiency of the colliery, for which purpose the Committee shall be required to examine weekly output performances in relation to the colliery target and initiate effective measures to improve production in close co-operation with the workpeople and the local trade union lodge.
5) The development of arrangements designed to secure the active support of the Committee's activities by the workmen and the Trade Union Lodge.
6) The scrutiny of current and future development plans of the colliery and of reports prepared by the colliery manager on mining supplies, e.g., shortages, equipment lost and salvaged.
7) Any other appropriate matters referred to the Committee by the Area Consultative Council.

The meetings of the Consultative Committee are held fortnightly, and additional meetings are held where it is agreed by the committee that they are necessary. The National Coal Board pays an expense allowance of 5/- when meetings are held outside normal working hours, or makes good any loss of earnings incurred by members when meetings are held during their normal working hours. The agenda for meetings is prepared by the secretary, and any person employed at/.

1. See Page 676.
at the colliery and the local lodge is entitled to submit items for inclusion. Such items are included if they relate to matters covered by the Committee's functions and secure the approval of the chairman. If the chairman decides against including an item, the matter must be reported to the Committee. Minutes of the committees must be forwarded within four days both to the Area Consultative Council (or whatever is the next "formation" in the division) and to the Area Labour Officer. In the event of any difference of opinion a matter may (if the members raising it wish) be referred to the Area Labour Officer, and if not settled by him, to the next meeting of the Area Consultative Council.

It will be noted that the range of subjects within the competence of the committee are wider than those specified for the old pit production committee. Its function with regard to production is placed fourth on the list, and although this list did not imply any order of priority, the National Consultative Council might have been wiser to place production squarely at the forefront of its memorandum to pit committees. As set out in the constitution the committee's responsibility for production tends to get lost among a plethora of other matters; we shall see later whether it gets lost in the actual working of the committee.

The election of workers' representatives, it will be observed, strikes a compromise between trade union responsibility and that of the miners as organised at the place of work. Although there is deference to Whitleyism in the holding of elections at the colliery, the strategic position (i.e., the nomination of candidates) is occupied by the trade union lodges. Indeed, clauses (iv) and (v) of the committee's functions accept the need for co-operation by the trade union lodges as such.

The nomination of candidates by the local union branch was introduced in 1948. Until then any person working in the colliery (as long as he was a union member) had the right to nominate a candidate. In 1948, however, the National Union of Mineworkers requested that the procedure be amended. They claimed that the right to nominate candidates should be restricted to the local union branch, which should nominate at least two men for each vacancy. The National Coal Board replied that the existing procedure was working satisfactorily, and they saw no reason to change it. The National Union of Mineworkers replied that if joint consultation were to succeed it must keep in step with the men's own recognised association - the local union branch - whose officials were themselves democratically elected. They cited evidence where consultative committees/
committees were in conflict with the local union branches. At some collieries, particularly where reorganisation schemes had involved dismissals or transfers to other pits, the mineworkers' representatives had opposed the union's recommendations in the matter. In other cases the reverse had been true; the union branch had rejected the recommendations of the consultative committee, resulting in complete deadlock. Elsewhere, the National Union of Mineworkers alleged, committee representatives had acted indecisively because they had not known how the trade union branch would view their decisions. At one colliery there had been deadlock upon the subject of retirement of elderly workers; the consultative committee had recommended that men over 70 should be asked to retire, and this had been strenuously opposed by the union. The management of the pit had been placed in an invidious position, not knowing whose claim to speak for the workers was the genuine one.

The National Union of Mineworkers' request was discussed at the National Consultative Council, with the National Coal Board deploring the attempt to depart from what it considered to be the raison d'etre of consultation at pit level. The matter was referred to Divisional Consultative Councils, where most of the arguments on each side were reiterated, and the National Coal Board representatives finally - and very hesitantly - capitulated. The amended constitution for colliery committees, as set out above, came into operation at the end of 1948.

The payment of an expense allowance (or compensation for loss of earnings) was a useful step in widening the appeal of serving upon the committees, and extended the possibility of membership beyond the range of full-time officials. In fact, as we shall see later, insufficient advantage has been taken of this possibility.

The proceedings of a typical consultative committee, which I attended at Arniston (Emily) Colliery on 22nd July, 1952, are described below. Twelve delegates attended, and the Deputy-Chairman, Mr. William Bain (a miners' representative) took the chair. Mr. Davidson, the Sub-Area Labour Officer, attended in an advisory capacity, this being one of the nine collieries in the Southern Sub-Area for which he is responsible. Also present were: Mr. Wilson and Mr. Tait (oncost workers), Mr. Marshall (faceworkers), Mr. Wilson (representing enginekeepers, boilermen and firemen), Mr. Littlejohn and Mr. Hogart (surfaceworkers), Mr. Brinton (Deputies), Mr. McNeil (undermanager, Emily Pit), Mr. McBute (undermanager, Gore Pit), and Mr. Clark, (secretary). Mr. Bain, the miners' second representative conducted the proceedings in an extremely brisk and accomplished fashion.
Discussion opened upon the subject of the rat menace in the pit, and the danger of leaving bread about. One delegate declared: "We have found the guilty person in my section and eliminated him." The need for using conveniences in the pits was also stressed, and one delegate asked for chemical sprays to be provided to destroy flies.

The next item which came up was concerned with welfare. A delegate complained that the cost of soap for pithead baths was being arbitrarily deducted from the paypackets of all men. Formerly men had been able to purchase soap whenever they wanted it at the baths. Why had the men not been consulted? Who gave the National Coal Board permission to tamper with their pay packets?

The Deputy-Chairman replied that the decision had apparently been made by the Finance Department of the National Coal Board, and he agreed that it was wrong. The canteen could sell soap to those who wanted it; it already sold tobacco, cigarettes and lemonade. The committee should leave it to the manager to protest about the matter. Mr. Davidson intervened to say that he would also take it up direct with headquarters.

A delegate then asked on behalf of one of his "constituents" whether dentures broken at work could be replaced from Welfare Funds, and Mr. Davidson promised to do what he could for the man in this matter.

Then followed a very lengthy discussion upon housing. Applications came before the committee for consideration, although the committee could do no more than make recommendations in the matter (its previous powers of disposal had been recently removed). A delegate complained that too many men coming from Newbattle, and Newtongrange, were receiving houses before local Arniston lads. The Deputy-Chairman replied that when houses had been built in Newtongrange the men would move back, vacating their Arniston houses. He reminded the committee that under National Coal Board policy Arniston houses were not necessarily built for Arniston men; they belonged to the National Coal Board and to the industry as a whole. Another delegate asked why the colliery committee had been stopped from allocating houses, but no answer was forthcoming. Mr. Davidson contented himself by observing that Arniston workers had been very fortunate in getting houses, to which a delegate replied: "You try telling them that!"

An application form was then submitted to the committee for observations. It had been sent by the National Coal Board on behalf of a key man, and it aroused considerable indignation. As one delegate put it: "I don't like this key man business. Every man is a cog in the wheel." The committee decided that its only observation to the National Coal Board was that this man should take his turn with the rest. Mr. Davidson reminded the committee of existing housing procedure.
procedure. The power to allocate houses rested with a small committee consisting of the Sub-Area Factor, the Sub-Area Labour Officer, and the National Coal Board Agent of that particular group of collieries (representing the Sub-Area Production Manager). Their decisions could be challenged by an appeal to Area level. The first step, if the National Union of Mineworkers was dissatisfied with an allocation, was for the union official to approach the Sub-Area Production Manager.

The last item to be discussed was concerned with production. A delegate complained that recently installed brushing machinery was ineffective; they had been waiting eighteen months for spare parts. Why should the National Coal Board be demanding that miners should produce more coal (laying the blame upon the workers for failing to produce it) when they couldn't supply the proper machinery for the job? Mr. Davidson replied that there was a national steel shortage, and that the allocation of steel was dependent upon pre-war output, except for new pits. "I heard a manager told the other day that he could have his new conveyors in two years' time." A delegate asked whether the manager at Arniston had been responsible for the change from "shakers" to "chains". This is what had caused the upheaval and delay. A management representative replied that "higher policy" had been responsible, and had done it for the best - "not just to annoy you". "Well, it's not proved economical up to now", was the answer, and the committee adjourned at that point.

After the meeting was over I discussed the value of its work with some of the workers' representatives. There was criticism that too much time was taken up discussing housing, a matter in which the committee had no effective power. Another criticism was concerned with mechanisation and planning. According to Mr. Wilson (who had worked for fifty years in the pit) "new plans come from London. We have a chance to discuss them but not to alter them." Another delegate supported this view. "There is too much dictation from high level to low level. We can't alter anything at the colliery stage. Our discussion should go back up the line for a decision to be made." There then followed a discussion upon the technical limitations of the new machinery at Arniston.

When asked later to comment upon these criticisms (anonymously related to him) Mr. Davidson's reply was: "No workers' representative has the same overall knowledge of the pit as the manager. He can speak intelligently of his own section, but he is not in a position to discuss the whole." Mr. Davidson emphasised that although Arniston had a low output (16 cwts. OMS compared, for example, with Easthouses' 34 cwts. OMS) there were a considerable number of miners/
miners employed on development and project work to which no output accrued, although it would yield results eventually. But in the short run it resulted in OMS (the relationship between output and the number of men employed) appearing deceptively small.

The proceedings of another colliery consultative committee - Easthouses Colliery, near Arniston - give a more vivid picture of the controversy which takes place upon production topics. The report given below is based upon my own verbatim notes; the official minutes of the committee meeting concerned contain very little of what I recorded. These minutes do little more than record the decisions reached; many of the more colourful speeches are omitted altogether.

I attended the Easthouses Consultative Committee meeting on 11th June 1952. The manager of the pit, Mr. Boyd, was in the chair, and the major part of the meeting was concerned with discussing new machinery which had been introduced into the pit, and which had led to a fall in wages for some of the men. The men's grievance was intensified by the technical defects which they alleged were inherent in the new machinery. Feeling had been running high in the pit for some weeks, and this particular meeting was attended by the Area Production Manager (Mr. Buchanan), the Sub-Area Production Manager (Mr. Allan) and the Area Labour Officer (Mr. Tague). The meeting was lively, and at times abusive, but it finally dispersed upon a more conciliatory note, due largely to the extraordinarily skilful handling of Mr. Buchanan and Mr. Allan. Both these men were so obviously concerned as engineers of ability and integrity, to see that mechanisation was introduced with the greatest possible speed and convenience, that they won a hearing at every point for their firm and clear technical exposition. They did not, however, allay the fears of the miners completely, as the following extract indicates.

Mr. Buchanan: (who is Area Production Manager) - It seems to me that some of you are content to agree to mechanisation in principle but not in practice.

Mr. Rutherford: (National Union of Mineworkers) - My men have suffered reductions of from 30/- to 50/- a week through the introduction of the new machine. That is what concerns us ... the pit is dislocated ... if any new ground had been broken it would have been O.K. But here was a highly productive seam dislocated. I could put it in stronger language - pit language but I am content to say it was a dismal failure. The men suffered a loss of wages. I agree we have discussed this before as a committee. But the men have not yet discussed it. And they find that the market value of their labour/
labour has depreciated through no fault of their own. A miner has only one thing to sell - his labour. And mechanisation is introduced - we know very well - to economise in manpower. The National Coal Board are following on with the old mentality of colliery owners - if economies are necessary make them in labour; hit at the underdog ... It will be a very difficult proposition in future to get men to agree to the installation of any further machinery.

Mr. Buchanan: You have been too bitter about mechanisation. I would take exception to your statement that National Coal Board officials carry on the old tradition of hitting at the underdog. I don't agree that it has been a dismal failure. New machines have never been introduced without trouble at the time. Plenty of you here remember the installation of the first coal cutting machines (disc machines). You will remember the breakdowns and dislocation in the early days. If the miners then had adopted the same attitude as you are adopting to-day, to this new machine, we would never have had coal cutters. Give it a chance; give the manufacturers a chance to vary the skids ... we are experiment- ing at the moment - don't be too hasty.

Mr. Tague: (Area Labour Officer) - What Mr. Rutherford is after is that we don't neglect the human machine in the meantime.

Mr. Allan: (Sub-Area Production Manager) - The men know what's going on; the manager at this pit has kept them posted, I know, all the time. The keynote of National Coal Board policy with regard to mechanisation is machines to improve conditions and OMS. All trials will not be successful. We can only find the limitations of a machine by trying it under less favourable conditions.

Mr. Rutherford: Your machine is doomed to failure without the co-operation of my men. Place yourself in their position; would you like a reduction in your wages? ... Don't forget that ultimately your machines depend upon men to operate them.

Mr. Buchanan: ... We have the best conditions to operate this machine. We plan to double output of this colliery in two years. If any redundancy should arise then will be no difficulty in transferring trained men within the Newbattle group. And rates are fixed within the Newbattle group to give a living wage to everyone.

Mr. Hughes: (National Union of Mineworkers) - The men didn't approve the machine I earned £2:4:- a shift as a stripper. During the installation I was transferred to another part of the pit. I suffered a reduction of £3 per week during the experimental period of three weeks. I am not opposed to machines, but there must be a safeguard. I intend to put a resolution to the National Union of/
of Mineworkers' branch meeting.

Mr. Allan: This is a consultative meeting. We must not discuss wages here.

Chairman: No, we cannot discuss wages.

Mr. Buchanan: The Chairman can end the meeting as a consultative meeting and discuss wages with the National Union of Mineworkers representatives.

Mr. Allan: But we need notice of such a proposal. And Mr. Moffat must be present.

Mr. Rutherford: I say this with every respect; if you place yourself in the men's position you'll see their point of view. When we are asking for something tangible the first thing we are told is "cost". But sometimes wages in an uneconomic pit are higher than in an economic. Where do we stand on this cost question. I have been told that pit managers have discretionary powers. Are they afraid to use them?

Mr. Buchanan: They have discretionary powers but they must watch the repercussions on other pits. They have to consult other people ... after all, the National Union of Mineworkers does that too. But nobody questions the manager's decision if he thinks John Brown is worth another 1/- a shift. It has never happened that the manager has been over-ruled on this issue.

Mr. Hughes: We should be discussing the merits of the machine. We should have been taken into confidence before the machinery was introduced, and should have reached agreement about the men displaced. Then - and only then - could we have discussed the merits of the machine impartially.

Mr. Buchanan: The technical viewpoint is ... the machine is not going as well as it should. We aim to get the output of three shifts in two ... men will still have to work, but the machine will move the drudgery of the shovel.

Mr. Allan: You men are looking at your "ain midden he'd." This is part of experiments going on all over the country. It may only require a small adjustment. It would be a mistake to take out the machine at this stage.

Mr. Hughes: The machine is backstripping all the way. There is unusually soft coal in this colliery.

Mr. Buchanan: We need a plough behind the machine. We shall have to find the exact position of the chains ... I am not promising that this will be the end of mechanisation in Easthouses.

Mr. Tague: There is an agreement about the displacement of men through mechanisation. They are guaranteed their previous average wages for a month. I suggest you look up the agreement ...

Chairman: Some conveyor troubles are due to electrical breakdowns ... they are not/
not the fault of the machines ...

Mr. Rutherford: I have heard that somebody in the National Coal Board says that they can dispense with 16,000 men in the industry.

Mr. Buchanan: There will be no redundancy in the Lothians in your lifetime.

Mr. Allan: That's right. But we must put the existing labour force to the best possible use ... That's only common sense ... you can see it for yourselves ...

The questions we have been discussing to-day are more important than many footling things which appear on the agenda ... It is your job to co-operate with management.

These committee discussions indicate that production matters arouse interest largely in so far as they impinge upon wages and conditions - factors which belong more properly to the field of conciliation. Indeed, the method of election which gives the trade unions control over the consultative committees (contrary to Whitleyism, and contrary to the wishes of the National Coal Board) intensifies the bias of "bargaining" rather than co-operation. But exclusion of the trade unions would solve nothing; the committees would become merely irresponsible "talking shops", discredited at every turn by trade union action. Furthermore, consultation cannot be successful unless it is based upon conciliation. Agreements upon transfer of workers and revision of wages are essential to harmony in the consultative committee room. Without these agreements, workers' co-operation upon production matters will be so qualified by reservations as to be worthless. On the other hand, even when such agreements have been arrived at, management has not received the co-operation from the men which it was entitled to expect. I have not interviewed a single manager or production official or labour officer who would dissent from this observation. Indeed, many expressed themselves in considerably more forcible language than can be reproduced here.

A further attempt by the National Coal Board to secure the co-operation of the miners in production matters in the Wages Agreement of 12th February 1953 was made. The relevant clauses of this agreement stated:

"The union executive will join the members of the Board and of Divisional Boards in a campaign to inform management and men of the facts existing in the industry, and to emphasise that a happy and prosperous industry and the well-being of the country depend on the creation and maintenance of a true spirit of co-operation between management and men and of a determination to improve efficiency."

"Joint Committees of representatives of the Board and the National Union of/
of Mineworkers will be set up in every division to consider and initiate the measures to improve efficiency and to remove difficulties at pit level."

Arrangements were accordingly made to hold meetings throughout the various coal fields to bring home to the miners the need for better consultation; area and divisional officials of the National Union of Mineworkers and the National Coal Board held discussions with pit and area production committees, with mine managers, and with local union officials to devise methods of raising output and improving relations in the pits. The team of speakers selected to tour all the divisions included Sir William Lawther, Mr. Ernest Jones and Mr. Arthur Horner (National Union of Mineworkers), and Sir Hubert Houldsworth, Sir Andrew Bryan (formerly Chief Inspector of Mines) and Mr. Ebby Edwards (National Coal Board).

On the basis of past experience it would be unwise to expect too much of these consultations. In Scotland there was strong discontent over the rejection of the 30/- wage demand, and the unofficial stoppages over its rejection (which accounted for 68,000 tons in this division) had created an atmosphere far from conducive to successful consultation. Some National Coal Board officials believe that the Communist members of the Scottish National Union of Mineworkers deliberately pitched the claim so high knowing that its subsequent rejection would generate widespread discontent. Whether this allegation is true or not, the fact that it is believed by some officials is sufficient to indicate the mistrust which exists in the Scottish coal fields.

More tangible evidence of trade union caution in production matters is provided in a statement made by an area general secretary of the National Union of Mineworkers less than a fortnight after the signing of the February Wage Agreement. This union officer, Mr. Edwin Hall, stated that the discussions with the National Coal Board under this agreement were not regarded by the National Union of Mineworkers as a production drive. They were concerned with something rather less - "an efficiency campaign" - and management, as well as workers, would have to play their part. "The committee is adamant that if we as mineworkers have to accept our full responsibility to the industry, which we do willingly, we demand the right to be consulted and to have full co-operation from the managerial side. Without that there would be no taking part in any campaign."

The trade union argument is that the men's unstinted contribution to production is conditional upon the wages, conditions and other concessions which they/

they receive from the National Coal Board. If the National Coal Board does not give them a square deal, then they must expect caution from the men in their response to exhortations for higher production. This argument is, of course, a traditional one, and it has its roots in the bitter experience of the past. But it is making nonsense of the claim of many generations of sincere and idealistic socialists that nationalisation would lead automatically to maximum production. It is argued by some union officials that the present structure of the National Coal Board is not socialist, and that until genuine workers' control is achieved full co-operation by the workers cannot be expected. This raises questions beyond the scope of this enquiry. Given the existing structure of the National Coal Board, however, it seems that the main hope for successful consultation lies in the new generation of miners who are passing through the industry's training centres. If these young men can be made "machine-minded", if they can be taught the wider industrial problems of the industry, then consultation upon production matters can be successful even beyond the dreams of Whitley.

The joint consultative machinery described above does not, however, exhaust the post-nationalisation structure of consultation in the coal mining industry.

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1. See Chapter VIII.
Special Consultative Machinery for Welfare Purposes

It will be remembered that, previous to nationalisation, machinery had been in existence for the discussion and implementing of welfare activities. Under nationalisation the Miners' Welfare Commission continued to operate but with some amendments to its constitution. Section 40(1) of the 1946 Act provided that:

"The Miners' Welfare Commission (in this section referred to as 'the Commission') shall, instead of consisting of ten persons appointed by the Minister as provided by subsection (1) of section two of the Mining Industry (Welfare Fund) Act, 1939, consist of a chairman and nine other members appointed by the Minister, and all persons who hold office as members of the Commission at the commencement of this Act shall vacate office, without prejudice however to their eligibility for reappointment under this section."

This meant that there was no longer any statutory obligation for the representation of various interests; the Minister could appoint whosoever he considered suitable. He was empowered to give directions of a general character to the Commission as to the exercise of their functions (40(6)), and the Commission was to "give effect to any such directions." Another clause (40(5)) stated that "the Commission shall have power to act as agent of the Board with respect to any matter relating to the health or welfare of persons in the employment of the Board, notwithstanding any limitation or restriction imposed by the Mining Industry Acts 1920 to 1943."

Activities removed from the jurisdiction of the Commission included the appropriation of funds to research into the health and safety of mineworkers, (40(4)).

But it will be remembered that another section of the Act (46(1)(b)) above (see page 142) had laid responsibility upon the National Coal Board for "questions relating to the safety, health or welfare" of their employees. This meant that there were two bodies - the Commission and the Board - concerned with welfare matters, although their jurisdiction was not identical. The Board, unlike the Commission, was empowered to make arrangements for the welfare of all their employees, whether they were mineworkers or not. The Commission, however, had wider powers than the Board for making welfare arrangements for miners' dependents.

To avoid duplication of work discussions were started in 1947 between the National Coal Board, the Commission and the trade unions concerned with consultation to integrate these welfare activities. On 4th December 1947 the Minister/
Minister of Fuel and Power\textsuperscript{1} announced that a new scheme would come into operation as from 1st January 1948. A new joint authority was created - the National Miners' Welfare Joint Council - to consist of all the members of the Miners' Welfare Commission plus two representatives of the National Coal Board, with an executive organisation henceforth serving both bodies. This organisation was staffed, housed and administered by the National Coal Board.

The new Joint Council was henceforth to plan and direct welfare activities for the benefit of all workmen in or about coalmines, and their dependents, and others in the National Coal Board's employment. The Council was to be supported by a Divisional Welfare Committee in each Division (replacing the old District Welfare Committee), consisting of representatives of the National Coal Board and the recognised unions, on lines similar to the formal consultative machinery. There were also established Area and Local Welfare Committees. Local committees, which worked in close relationship to the colliery consultative committees, were responsible for the actual running of welfare schemes, such as pithead baths and canteens, institutes and recreation grounds.

The personnel of the new divisional and area committees remained largely the same throughout the changes. In February 1948 the Chairman of the Miners' Welfare Commission, Sir Joseph Hallsworth, wrote to all members of the old District Committees: "... It is a matter of considerable satisfaction to me personally, as well as to the Miners' Welfare Commission, the National Coal Board and the National Miners' Welfare Joint Council that many of the present representatives on the District Committees can expect to find themselves continuing with miners' welfare work as members of the Divisional Committees. Finally, the Commission desires to take this opportunity of expressing its high appreciation of the loyal keen and self-sacrificing services rendered by the Chairman, the vice-chairmen, members and officers - past and present - of the District Committees during the past 27 years and without whose help and advice it would not have been possible to lay the same foundations of miners' welfare activities upon which can be built that larger edifice of welfare, which has become possible by the unification of the coalmining industry under the National Coal Board and the consequent co-ordination of its welfare work with that of the Miners' Welfare Commission."

\textsuperscript{1} National Coal Board
Annual Report and Statement of Accounts for 1947
London
HMSO
Page 35.
One consequence of this new co-ordination was the signing of an agreement, called the "Omnibus Agreement". In April 1949, the Miners' Welfare Commission and the National Coal Board provided for the maintenance, operation and eventual disposal of pithead baths and canteens provided at the expense of the Miners' Welfare Fund. Under the terms of the agreement1, the National Coal Board were assisted in their management of these premises by committees of eight members of whom four were appointed by the National Coal Board and four by the workmen. These committees, whose members held office for one year, thus provided additional consultative machinery at the colliery level. They advised the National Coal Board on the management, operation and use of facilities, framed regulations for the good conduct of users, and arranged for the appointment of workers' representatives at the end of their term of office. The National Coal Board agreed that those pithead baths and canteens which had been provided (and were to be provided in the future) from National Coal Board funds were to be managed on similar lines. This agreement remained in force until 1951, when the name of these Committees was changed, and a new form of colliery welfare machinery was prepared.

Consultative machinery for welfare purposes was revised to meet certain changes which took place in 1951. As the output levy was due to cease at the end of 1951, the National Coal Board and the National Union of Mineworkers were forced to review the arrangements for welfare in the industry, and their recommendations to the Minister led to the passing of the Miners' Welfare Act, 1952.

Under this Act coal industry welfare was divided into "colliery welfare" and "social welfare". The National Coal Board became responsible for "colliery welfare" (i.e., the welfare of the miner at his place of work) and all colliery welfare assets (e.g., pithead baths and canteens) were transferred to the National Coal Board. A new body, the Coal Industry Social Welfare Organisation was established to administer "social welfare" (i.e., the welfare of the miner at leisure). This body contained representatives from the National Coal Board, the National Union of Mineworkers, the National Association of Colliery Overmen Deputies and Shotfirders, and managerial grades.

The Miners' Welfare Commission, after a long and honourable career, was dissolved, and its functions, assets and liabilities passed to the National Coal Board or the Coal Industry Social Welfare Organisation, according to whether they fell into the "colliery" or "social" welfare categories. The National Coal Board

Coal Board, for its part, made over all "social" assets to the Coal Industry Social Welfare Organisation. Altogether £1,500,000 of existing miners' welfare funds were placed at the disposal of the new organisation, and the National Coal Board made a gift of a further £1 million. From these funds the Coal Industry Social Welfare Organisation makes annual allocations to Divisional Welfare Committees. The National Coal Board's grant was virtually unconditional; the National Coal Board said, in effect, go and spend the money to the best of your ability, and when your funds are down to £400,000 come back for more. We will decide then whether to give you more money or not.

The new arrangements, which came into effect on 1st July 1952, meant that the National Miners' Welfare Joint Council was left with nothing to do, and it was accordingly dissolved. In spite of handsome official tributes to its short-lived period of activity, this Council had not been particularly useful. It had fallen between two stools - colliery and social welfare - and its responsibilities had been badly defined. At least one highly-placed welfare official in Scotland was pleased to see it abolished. There were, however, complaints from the welfare staffs in the employ of the National Miners' Welfare Joint Council (many of whom had served for long period with the Mines Welfare Commission) that they were not found suitable jobs when the Council was wound up.

Let us see what new machinery the introduction of the Coal Industry Social Welfare Organisation involved. It must be emphasised again that the Coal Industry Social Welfare Organisation was independent of National Coal Board hierarchy, although it contained National Coal Board representatives on an equal footing with union representatives. It was, in fact, registered as a company, and conducts its business accordingly.

The Coal Industry Social Welfare Organisation Divisional Welfare Committee for Scotland consists of representatives from the directorate of the Division on the National Coal Board side, and representatives from the trade unions mentioned above. These union representatives are full-time officials (usually the Scottish officers of the unions concerned) and there is consequently a powerful and influential membership behind committee decisions. This Divisional Welfare Committee is concerned with social welfare (i.e., recreation grounds, convalescent homes, etc.) and is responsible for spending money on these activities. The National Coal Board Divisional Welfare Officer for Scotland attends the Committee as an assessor.

One of the first responsibilities of the Scottish Divisional Welfare Committee was to set up machinery at a lower level. The National Coal Board representatives suggested Area Welfare Committees (approximating, of course, to National/
National Coal Board areas) or District Welfare Committees consisting of two National Coal Board areas. This would mean that the Coal Industry Social Welfare Organisation social welfare activities could be dovetailed with colliery welfare activities (which were the responsibility of the National Coal Board and hence followed the National Coal Board organisational pattern). But the National Union of Mineworkers wanted to preserve the old Miners' Welfare Commission districts as a basis for the new District Welfare Committees. These districts, however, bore no resemblance to National Coal Board organisation. There were four of these old districts; Fife (including East and West Fife, Clackmannan and part of Alloa area), the Lothians (including part of West Lothian, Midlothian, and East Lothian), Lanarkshire (including Stirlingshire, part of West Lothian and part of Alloa area), and East and West Ayr.

After considerable argument, the National Union of Mineworkers (under the powerful leadership of Mr. Abe Moffat) won its point, and the organisational structure of the Coal Industry Social Welfare Organisation now follows the old Miners' Welfare Commission pattern instead of that of the National Coal Board. There seems to have been two reasons underlying Mr. Moffat's intransigence over this matter. The first was that the districts agreed upon are in fact identical with the districts in the organisational structure of the National Union of Mineworkers, and the union has continually refused to amend its structure to approximate to that of the Board. The second point is that the miners' union wished to emphasise the independence of the Coal Industry Social Welfare Organisation, and maintain traditional links with the old Miners' Welfare Commission (which had, of course, been a completely autonomous organisation). The National Coal Board, in view of its generous contribution to the Coal Industry Social Welfare Organisation, felt that it was entitled to some compromise upon this point, but it did not in fact receive any. The Districts¹ were set up in the manner demanded by the National Union of Mineworkers. The District Welfare Committees consist of five National Coal Board representatives (one of whom represents the managerial grade, and four from the Area General Managers' staffs), and representatives of the unions (all at present full-time officials).

¹ The reader should guard against confusion in the definition of "districts", "areas", etc. What the NUM describes as a "district" is similar to (though not identical with) what the NCB calls an area; what the NUM describes an area is classified by the NCB as (a) a Division for administrative purposes, and (b) a Wages District for conciliation purposes. It is hardly surprising that very few NCB officials (outside the Labour Department) understand the machinery works.
With the new division of welfare duties which came into effect on 1st July 1952 certain aspects of colliery welfare were removed from the province of the previous consultative machinery. These were pithead baths and canteens. A new Divisional committee was set up under the title of the "Divisional Colliery Welfare (Pithead Baths and Canteen) Consultative Committee", and it consisted of National Coal Board and union representatives, on similar lines to the ordinary consultative machinery.

This committee inevitably became the parent of a host of committees at colliery level. These were the "Colliery Welfare (Pithead Baths and Canteen) Consultative Committees" and they were set up at collieries, like Arniston, with an output of over 300 tons per day. At collieries producing less than 300 tons the ordinary consultative committee is responsible for discussing pithead baths and canteens.

The Colliery Welfare (PHB & C) Consultative Committee (to use the National Coal Board's abbreviation) consists of eight members, four from the National Coal Board and four from the unions, and there is provision for ensuring that membership includes men who are also on the ordinary consultative committee. It must be stressed, however, that these committees are not executive in the sense of the old committees which administered pithead baths before nationalisation. Pithead baths are now the property of the National Coal Board, and the committees are merely advisory, on the lines of the committees which formerly operated under the "Omnibus Agreement."

It need hardly be added that someone suggested setting up this Pithead Bath and Canteen consultative machinery at District level. Accordingly District Colliery Welfare (PHB & C) Consultative Committees were set up, but so far they have never met. It is now suggested¹ that the District Welfare Committee (Coal Industry Social Welfare Organisation) shall also act as a District Colliery Welfare (PHB & C) Consultative Committee. Whereas in the former capacity it is executive (acting for Coal Industry Social Welfare Organisation, administering centres, spending funds, etc.) it would, of course, be purely advisory in its second capacity. So far no decision has been reached upon this point.

Let us recapitulate the present position with regard to consultative machinery, upon welfare matters.

The National Coal Board dispenses colliery welfare, in collaboration with the workers, through two main channels; the normal consultative machinery, and the special/

¹ January, 1953.
special pithead bath and canteens machinery. This machinery operates at divisional and local levels.

The Coal Industry Social Welfare Organisation (upon which the National Coal Board is represented) is an independent organisation administering (at divisional, district and local level) the provision of social welfare facilities, convalescent homes, centres, sports grounds, cultural and dramatic activities, etc.

Finally, there are ambulance committees at divisional and area levels, consisting of National Coal Board and union representatives and largely financed by the National Coal Board (although subscriptions are also given by the unions). These committees play an extremely important part in such matters as first-aid training and safety instruction.

Apart from these ambulance committees which do very valuable work, there are far too many committees concerned with welfare.

The normal consultative machinery was designed originally (see page 143) to deal with welfare matters among its other duties. In Scotland for instance there was already in existence a Health, Welfare and Training Sub-Committee of the Divisional Consultative Council. This sub-committee could very well have dealt with welfare matters, instead of setting up an elaborate new parallel organisation to deal with pithead baths and canteens. These matters could have been kept within the province of the colliery committee without overloading the agenda.

The present consultative structure is unwieldy, and unintelligible to many of the men employed in the industry. I do not refer in this respect merely to working miners; most of the officials do not understand the machinery either. As one of the essentials of joint consultation is to educate the men towards intelligent participation in the running of their industry, this criticism is a serious one. There seems little doubt that enthusiasm for committees of every sort at every level has run amok in the coal industry.

There are private misgivings among some National Coal Board employees about the top-heavy structure of consultative machinery since nationalisation. One official blamed pressure from the National Union of Mineworkers for this state of affairs. He argued that on welfare matters (which was "one-way traffic" - the National Coal Board giving and the National Union of Mineworkers receiving) the National Union of Mineworkers had everything to gain and nothing to lose by the multiplication of committees. The more committees the more welfare facilities could be secured. As a general criticism this is too sweeping. But it perhaps does explain the reluctance of the National Union of Mineworkers/
Mineworkers to have welfare placed under a sub-committee of the Consultative Council (as originally intended). A fully-fledged Divisional Council in its own right obviously offered greater scope for securing improved welfare amenities. And there seems some justification in the National Coal Board's argument that the National Union of Mineworkers does not display the same enthusiasm for co-operation on production matters as it does upon the subject of welfare.

By no means all the blame can be attributed to the National Union of Mineworkers in this matter, however. An organisation like the National Coal Board is perhaps not as averse to multiplication of committees as it pretends to be when cross-examined by a critical investigator. The elaborate labour relations and welfare staffs set up after nationalisation are naturally concerned to justify their existence. This is not intended as criticism of many very hard-working officials whose contribution has been vital to the well-being of the industry. But whereas a good deal of their work is unspectacular and routine, the establishment of committees provides an excuse for impressive minutes and erudite reports which can be relied upon to reach the desk of a superior. In a large organisation there is always a certain prestige and authority attached to committee work. There is no reason for believing that National Coal Board officials are immune from these temptations. Committees and sub-committees will go on sprouting unless there is continual ruthless pruning from a high level. This is not being done in the field of consultation at present.

From the point of view of the consumer this extravagance is reflected, however minutely, in the price of the end product.

From the point of view of the worker, with which we are particularly concerned in this survey, there is the very real danger that the spirit of consultation is being stultified through over-elaborate machinery. This is particularly unfortunate in view of the sincere attempts that the National Coal Board has made over the last six years to bring the workers into closer contact with the running of the industry.

Making the machinery work - (1) The Workers

It may be argued that a multiplication of committees, whatever their usefulness, does at least give the worker training in democracy. This argument would have more force if more actual workers sat upon these committees. The fact is, however, that above the colliery level, it is usually only full-time trade union officials (already overworked) who are the "workers' representatives" on/
on these committees. Most of the ordinary miners do not know of the existence of these committees. Their activities are known only to those miners who are also active trade unionists and attend regularly at their branch meetings. I asked a group of ten miners if any of them knew anything about the Coal Industry Social Welfare Organisation District Welfare Council. The question was received in silence. Not one of them knew of its existence, let alone the names of their "representatives" on it.

There seems to be no reason why more "lay" members should not sit on committee at the district and divisional levels. There is provision for the payment of wages and expenses in the consultation agreements, and in doubtful cases there is no reason why the trade union should not pay for the expenses of a lay member, as it does for its officials.

The present consultative machinery gives a prominent role to the trade union rather than to workers' representation as advocated under Whitleyism. The trade unions should acknowledge this new responsibility by ensuring that more working miners and far fewer full-time officials are brought into the consultative machinery at the divisional and district levels as well as colliery level.

At present the unions are not enthusiastic towards such a step. They are afraid that lay representatives upon, say, a district committee would find it difficult to take a dispassionate view, and may tend to attribute too much importance to his own particular background and craft rather than the overall needs of the workers. A further problem emphasised by union officials is that it is difficult for a lay member to discuss impartially such questions as promotion or redundancy, when they might themselves be involved. All the fears, however, are not on the side of the union officials. Many workers prefer to have full-time officials representing them at all levels ("what do we pay them for?") and do not place the same confidence in lay representatives. Even at the consultative committee meeting at colliery level it is interesting to observe the respect with which the lay representatives listen to, or quote, the views of the full-time National Union of Mineworkers official. ("Jock will see this through; he knows all about it, and he knows how to handle the manager.") If this obtains at local level, it is even stronger at higher levels. And then there is the latent cynicism of the Scots miner towards workmates who disappear ostensibly to a conference or a committee meeting in Glasgow, but in reality, as everyone knows, merely to enjoy a free holiday with pay and expenses. The full time official is immune from this jealousy; he is in a non-competing group.

It/
It would be a mistake, however, to assume that the union official's objection to lay representatives is at bottom less selfish than the workers'. There is always the fear which the professional feels for the amateur, and perhaps nobody shows this jealousy more strongly than the full-time trade union organiser. His touchiness is indeed understandable. He has only recently won an accepted place and status in society; for years he has battled on the one hand against the enmity of the employers and on the other against critical and (to his eyes) irresponsible elements in his own ranks. It is hardly surprising that he cherishes his authority and status, and that to him every thrusting and popular "lay representative" is an incipient rival and critic.

All these objections to lay representatives, whether inspired by selfish or disinterested motives, are to my mind invalid. The lack of lay representatives on a consultative committee is not a feature which must be accepted as inevitable; it is a challenge to the trade unions to make their movement more democratic and to educate their members towards an intelligent participation in the affairs of their industry. The unions should not be leaving it to the National Coal Board to train the miners in the practice of joint consultation (cynics might say that, if so, they would be waiting a long time) but they should themselves do more to challenge the apathy of their members. There are two basic needs here; to extend the facilities for industrial education available to their members; and to keep more in touch with the rank-and-file. The second requirement not only involves improving the means of "reporting back" to members upon conciliation and consultative matters, particularly from a national or divisional level, but also organisational changes that will make the trade unions more democratic. It is hardly logical for them to demand the democratisation of industry while failing to foster democracy in their own ranks. If the unions sincerely believe in joint consultation they must embark upon a positive educative policy among their members. And responsibility is best learned by the exercise of it; John Stuart Mill's views upon colonial government are equally applicable to the lay members of trade unions. 1.

Making the machinery work - (2) The National Coal Board

Mill's belief "in the art of accomplishing great objects by individual energy and voluntary co-operation" should also be taken to heart by management. From the National Coal Board's side all those officials who come into contact with/

with consultative machinery should be appointed and trained with the need for continual co-operation with workers in mind. Officials falling into this category can be classified under two main headings - "staff officers" and "field officers". By staff officers I mean those officials whose duties are theoretically advisory (although they may act with delegated authority). These are officials employed on labour relations, welfare, safety, education and training.¹ By field officers is meant chiefly the colliery managers and their immediate subordinates.

All the staff duties mentioned above² come under the jurisdiction of the Labour Director, who in each division is a functional member of the Board. The Area Labour Officer represents the Labour director at area level, and although his duties cut across both conciliation and consultative matters I have included consideration of these officials under the heading of consultation, rather than in any earlier chapter, for the sake of convenience.

A discussion of consultative machinery without taking into account of the character of the men who operate it would be somewhat arid. Details are accordingly set forth below giving something of the background of representative labour officers at various levels.

In Scotland the position of Labour Director of the Division is held by Mr. James Barbour, an ex-Trade unionist. Mr. Barbour was Chairman of the Scottish Area of the National Union of Mineworkers, and during the war he was one of the many union officials who entered the service of the Ministry of Fuel and Power. He became Labour Director for the Ministry and entered the employment of the National Coal Board upon nationalisation.

Under the director (who is a functional member of the board) there are two deputy-directors, one responsible for recruitment, training, education and welfare, and the other for conciliation, placements, housing and the "maintenance of good relationships at the colliery."

The former deputy-director is Mr. Park. Although he started life as a working miner he did not rise through union channels. After working in an Ayrshire pit he took his mining diploma at the Royal Technical College, Glasgow, and later became a mining lecturer.

The second deputy-director is Mr. Colthart who started work as a miner on 13th/

1. See Page 13 above.

2. Staff duties relating to production and planning are considered separately, (See page 175 below) insofar as they impinge upon the authority of the colliery manager.
13th May 1895. He worked subsequently in Ayrshire, Fife and Lanarkshire, playing an active part in the union, and eventually became Vice-Chairman of the National Union of Mineworkers. He gained his second class colliery manager's certificate. Mr. Colthart is a bluff, outspoken man, full of reminiscences of his early life in the pits. An enthusiastic believer in all that has been done in the industry since nationalisation, he stated: "I have seen more done for the miner in the last six years than anything that took place in the first fifty years of my life." He believes in personal intervention in disputes where necessary, although this is frowned upon by orthodox negotiators. "I went down to a pit last month and settled a dispute in twenty-five minutes. The manager had given the men too big a task. But not as big as Moffat said it was. I spoke to the men and told them that I knew just how they felt about it. They cheered me. And they accepted my figure for the seam, which was half a yard longer than the manager was going to accept." Mr. Colthart personifies the "man-to-man" approach in settling disputes.

Mr. Colthart's assistant is Mr. Barrowman, formerly Assistant Secretary to the Colliery Owners' Association. He displays an encyclopedic knowledge of awards, settlements, precedents, and minutes, gained from many years experience of bargaining on behalf of the employers. His work on behalf of the National Coal Board is a continuation of his previous role, and he discharges it just as meticulously within the limits, of course, of National Coal Board policy.

At the next level are the Area Labour Officers. The Area Labour Officer for the Lothians is Mr. P. Tague, formerly employed as a miner at Rosslyn, and later a local official of the union. He was secretary and delegate of the Rosslyn branch of the National Union of Mineworkers. In 1943 he became a Labour Officer with the Ministry of Fuel and Power. Mr. Tague provides another example of the forthright man of action, not without a pawky Scots humour.

Under Mr. Tague are two Sub-Area Labour Officers. One is Mr. Heron, an ex-colliery manager, who started work down the pit at the age of twelve. He was assistant labour director to the Minister of Fuel and Power during the war (he was, in fact, the superior of Mr. Tague during this period). Mr. Heron's management background is somewhat unusual among Labour Officers, who are mostly ex-trade unionists. His management background may explain why he has not risen as high in the Labour Department as his experience would seem to justify.

The other Sub-Area Labour Officer is Mr. Alexander Davidson, an ex-working miner with forty years experience underground, and later a National Union of Mineworkers/
Mineworkers official. He was employed as assistant labour officer (dealing with absenteeism) with the Ministry of Fuel and Power during the war. A quietly spoken, completely self-educated man, who entered the pit in early boyhood, Mr. Davidson's life has mirrored the history of the Scottish coal industry. Now in middle age he can speak of the past without bitterness and of the future without disillusionment. His relations with the men are friendly and unassuming, - he is almost apologetic about his collar and tie - and he believes fervently in the value of his work, in spite of the many obstacles he meets from both management and men.

Mr. Davidson claims that he enjoyed more authority in conciliation and consultative matters during the war than he does now. In those days he was a Government representative, called in to arbitrate and to heal disputes. Now his job is merely advisory. With regard to consultation, for instance, he is an ex officio member of all the committees in his group. All reports of these meetings come into his office. Paragraphs requiring his attention are noted. Copies also go to the Area Labour Officer and the Agent of the National Union of Mineworkers, and, if necessary, to the Area Production Manager. This latter official (Mr. Buchanan) claims that, in view of the consultative committees' concern with production matters, he should receive copies of all minutes automatically. This inter-departmental dispute has not yet been settled, but it illustrates the suspicion with which the labour officials and production officials of the National Coal Board regard each other.

The position of area labour officers is somewhat delicate and apparently their difficulties are common to most areas. It must not be assumed that any of the following observations necessarily refer, however, to the Lothians area.

From the side of management there is inclined to be suspicion of these officials as being responsible in some sense for "troublemaking" and interfering. Their usual trade union background does not help matters with colliery managers who have devoted their lives to opposing union demands. Added to this is the usual suspicion that the engineer feels for officials whose activities do not seem to be adding an ounce of coal to production.

From the side of the men the officers are not as acceptable as one might suppose from their working-class and union backgrounds. Indeed, in some cases, the hostility is all the greater. There is the "turncoat" argument, which wants to know why a man has left his mates at the coalface to join "them". The question is a rhetorical one; the answer that will be given you is that he has deserted them for a soft job and twelve hundred pounds a year. Then there is just/
just downright jealousy that a man has got so far with seemingly so few orthodox qualifications.

Another reason is that many area labour officers were wartime officials of the Ministry of Fuel and Power. They were taken on during the war to deal with possible labour troubles, and many of them had unpleasant duties to perform. They had, for instance, to instigate prosecutions, report offenders to the Ministry of Labour and carry out various disciplinary measures in the coalfields. These activities have not been forgotten, and some miners still nurse their grievances against these officials.

The final and perhaps most important reason is that in the last analysis Area Labour Officers are promoting the interests of the National Coal Board, and these interests are bound to conflict at times with those of the miners.

How have these ex-trade unionists, on an impartial estimate, measured up to their jobs? What should be the policy of the Board in making future appointments to the posts of labour officers? Achievements vary, of course, from individual to individual. Perhaps the worst case was that of an area labour officer who was forbidden by the union to enter one of his own sub-areas, so great was his unpopularity. This was the man who told a strike meeting: "Stay out as long as you like; you're not taking a penny out of my pocket." At the other extreme is the man who was cheered at a pit dispute meeting for his fair handling of the case (in circumstances where miners are not given to cheering National Coal Board officials).

Certain broad observations, however, emerge. First, that ex-trade union labour officers are frequently out of touch with rank-and-file feeling. Second, that many of them have been out of touch with the industry as workers during its most vital years, and have not kept abreast with a knowledge of production techniques that would enable them to participate usefully in the field of consultation. Third, they are sometimes tactless in their dealing with the production and management side of the industry. Fourth, their trade union background has not necessarily made them good administrators, and there are frequent criticisms that they are unable to answer and deal with the many small matters - letters, requests for information, etc. - which fall within their province.

These criticisms are not set out with any destructive purpose, but rather to indicate the way in which trade unions can improve their training of their officials if they wish to continue to supply recruits for the labour staffs of the National Coal Board. It is believed in some quarters, however, that fewer recruits/
recruits should in future be engaged from union sources. Another view expressed to me was that men with a union background are useful at a policy-making board level, but that these high-level appointments should be backed at lower levels by the appointment of younger men with good administrative ability, resilience of mind, and a "neutral" but efficient and brisk approach to problems. It may be that such as these would come to win the confidence of the miners, and that the importance of "working-class loyalties" as a basis for confidence was in the past exaggerated. This policy would probably mean, however, that the area labour officer (new type) would become rather more of an information officer and clerk than a positive mediator. There are elements both in the unions and on the production side of the National Coal Board who would rather see the area labour officer in this more restricted role.

From the viewpoint of management, area labour officers of this kind may be more efficient sources of information and guidance, and better relations might be established for instance with the deputy, who holds what is probably the most strategic of all positions in management - worker relationships. One deputy stated that he had found it to be a waste of time asking his area labour officer any question that was unduly complicated. Another deputy stated; "Management might like to get Area Labour Officers to do its dirty work - but they aren't capable enough for that."

Notwithstanding these criticisms, it must be remembered in fairness that it is almost inherent in the nature of the Area Labour Officer's job that he should be attacked from all sides. Colliery managers suspect that he is selling the Board's interests to the workers, and the miners are convinced that the opposite is true.

Nor can the sincerity of these men be impugned. Many bear the marks of a lifetime's toil in the bowels of the earth, and they are passionately convinced of the tremendous importance of the new work upon which they have embarked. Many of the difficulties which they have encountered do not arise so much from their personal limitations as from the circumstances in which they are compelled to work. In the transition period these ex-trade unionists and ex-miners have done work that could not have been done as well by men without their knowledge and experience of the industry. But as a long-term aim of the National Coal Board they should go beyond the ranks of ex-unionists in appointments to labour relations staffs. They should be recruiting and training a new/
new generation of these officers, looking for such qualities as administrative ability, resilience of mind, sympathy with the viewpoint of the workers, without sacrificing the interests of the Board, and with a broad general educational background. This last-named qualification is important; they must be able to grasp the importance of production methods and techniques insofar as they relate to disputes or consultative matters. There is no need for them to be mining-engineers - such a qualification would be wasted in this department when there is a desperate shortage of qualified men elsewhere - but they must have the kind of mind that can grasp the significance of technological matters in the same sense as the good advocate - although he lacks technical training - can quickly master his briefs in a complicated industrial lawsuit. It is also important that labour relations staffs should possess tact and a flair for "public relations." These qualifications may sound formidable but they are really no more than a good private firm demands of its middle-range executives. The view that no preference should be given to trade union applicants for appointment to the Labour Staffs is based upon the considered views of the National Coal Board officials from other departments, and from some within the Labour Department itself. Even allowing for certain prejudices the view of these critics has been sustained by experience; it is based also upon the testimony of the miners themselves, and of some trade union officials who do not like dealing with former comrades, for reasons given above. Whether their suspicions are justified or not (and frequently they are as irrational as those of management) the fact that such suspicion exists at all militates against satisfactory industrial relations in the colliery.

This suggestion should not be extended, however, to the Board level, (i.e., to the post of Labour Director). It is important that there should be a man on the Divisional Board with a thorough background of working conditions and of workers' organisations. Provided he possesses the necessary personal qualifications for this appointment a trade union background might well be an advantage.

Good industrial relations, however, depend finally not so much upon "Staff officers" (e.g., Labour and Welfare officials) as upon the men in the field or in "the line of command." Although staff officers relieve Area General Managers and Colliery managers of a vast volume of technical, specialised and administrative details they do not relieve them of responsibility. The Area General Manager, for instance, delegates work concerned with industrial relations to his Area Labour Officer. But he retains undivided responsibility to/
to the Divisional Board for the state of industrial relations in his area. Similarly the Colliery Manager owes undivided responsibility to the Area General Manager.

This responsibility is even more dramatically seen at the colliery level. That is why the post of colliery manager should always be filled by a man who is not only a good engineer but is well qualified in the art of administration and human relations. There have been too few men of such abilities in the past occupying managerial positions in the industry, and a very useful step has been taken in widening the education and training of future colliery managers (see Chapter VIII). The same observations apply to the posts of under-managers and deputies. Although it is important that Managers should be "consultation conscience" we must not forget, however, that it is the Manager who alone bears final responsibility for his colliery, and suffers blame or praise accordingly.

The fears expressed to the Samuel Commission about the undermining of the manager's authority occurred again in the post-nationalisation era. Reassurance was given upon this point by the National Consultative Council in a memorandum to pit committees in December 1948: "The Coalmines Act of 1911 states that every mine shall be under one Manager, who shall be responsible for the control, management and direction of the mine. Consultation is not inconsistent with the responsibilities placed on the shoulders of the Manager. Indeed, Consultation is regarded by the Board as an essential means whereby the Colliery Manager should discharge his duty of running his colliery efficiently and keeping the workers and officials an efficient and contented team."

It is true that the statutory rights of the manager have not been impaired. But his authority has been diminished in various spheres both from below and above. From below the right of appeal against disciplinary decisions has meant that the manager tends to be very wary in his exercise of authority. If appeals by the men are upheld on several occasions (and one manager cited three successive instances of cases - admitted by his Labour Officer to be flagrant examples of indiscipline - where the decision was given against him) then the manager feels that his reputation is beginning to suffer and his influence over the men weakened. Discipline remains theoretically the responsibility of the manager. But although he may attempt to involve his consultative committee in decisions, for instance, to reduce absenteeism which may necessitate taking action against an individual at a later date, when that time comes the manager will find himself alone and unsupported with every likelihood of his action being invalidated upon an appeal by the trade union. The same trade union officials who have given cautious support to a general scheme to reduce absenteeism/

absenteeism through the consultative machinery are now in the position of de-
defending their member (although they feel him to be guilty) against the steps
taken by the manager. In other words the support that the manager has mustered
in his capacity as chairman of the pit committee is dissipated when he puts the
matter to the test in his capacity as colliery manager.

An even more serious limitation upon successful consultation is imposed
upon the manager from above. Whereas the manager of a pit was previously only
once or twice removed from the centre of authority (the colliery company) he is
now at the end of a long chain of command. This chain stretches from the
National Coal Board, through the Division, through the Area and through the
Sub-Area. The most important man in this operational chain is now the Area
General Manager who is personally responsible to the Divisional Board for the
efficiency of area organisation. He instructs and advises his colliery
managers who remain personally responsible for coal face operations and such
matters as safety and health.

All the main decisions, however, upon such questions as production, market-
ing, finance, and scientific research are taken as Area Level or higher. Too
many decisions, in the opinion of Scottish National Coal Board officials, are
still taken in London. There is the story (probably apocryphal) of the message
to the Scottish Division from National Coal Board Headquarter which read: "In
future, in the interests of economy, two out of the four doors at Hobart House
will be kept closed." The reply of Dr. Reid, the Scottish Chairman, was: "In
the interests of economy, have you gone far enough?" But, as far as the
individual colliery manager is concerned, Edinburgh is almost as remote as
London. Dr. Reid's strictures upon Hobart House might well be applied by the
colliery manager to Eglinton Crescent.

The frustrations of the colliery manager, however, spring not only from the
length of this operation line but from the parallel "staff" organisation, i.e.,
from the specialist advisers who surround the location of authority at the
various levels.

There can be little doubt that the autonomy of the manager has been/ by the
introduction of technical specialists of all kinds. It was, of course, a major
object of nationalisation to introduce new technical posts and departments in
order to standardise practices and techniques, as well as to create new
officials concerned with training, welfare and labour relations. Before
nationalisation very few colliery companies had employed technical specialists
to any extent, and there was consequently a shortage of qualified men to take
up/
up these posts under the National Coal Board. This explains why specialists have been concentrated at higher levels rather than spread more thinly over the field, and has aggravated the manager's complaints about remote-control technical direction. Under nationalisation technical departments have been set up at national, divisional and area levels. Theoretically, as we have seen, there is a clear distinction between the "line" and "staff" in the pattern of organisation. While there is an unambiguous line of responsibility from the National Board right down to the colliery manager, there are specialist departments (the "staff officers") advising management at each level. In practice, however, the specialist department at National Coal Board headquarters keeps in touch with corresponding departments at Divisional and Area levels, and passes instructions to them upon technical matters falling within their jurisdiction. In the reverse direction, the specialist officers at lower levels often refer for advice to the corresponding officer at higher levels. I have been in the office of such a specialist officer when he has been requesting a "staff" superior, over the telephone, to issue a more precise instruction which could be used to put pressure upon a recalcitrant manager. Thus the manager may get orders from either of two sources; directly through the main line of command (i.e., from the Area or Sub-Area General Manager) or from the "staff" side on a technical or other specialist matter. Theoretically the former is the more categorical, and a manager can, if he wishes, appeal to his Area General Manager if he thinks the specialist has exceeded his authority. But, in fact, the manager is wary about being "awkward", particularly as he knows that the Area Specialist Officer concerned is stationed at Area HQ, and has the ear of the Area General Manager.

This is more true of the Production Department than any other. In the case of the Area Labour Officer, for instance, the Colliery Manager has little hesitation about complaining if he suspects excessive zeal on his officer's part. The Production Department, however, although theoretically just another "staff" department is obviously in practice closely linked with operational directives. At National level this department is under the control of a Director-General who controls the following six main groups: Operations, Planning, Engineering, Coal Preparation, Supplies and Secretariat. At Divisional level, the following branches operate: Survey and Mineral, Mining Development, Engineering, Safety, Coal Preparation, Supplies and Small Mines. At Area level the Production Department contains the following specialists: Mechanical, Electrical and Mechanisation Engineers, Chief Surveyor, Planning, Coal Preparation/
Preparation Engineers, Safety Officer, Supplies Manager and Estates Manager. At Sub-Area level in Scotland there is a specialist staff of nearly fifty (much greater than in some coalfields in England where the sub-area level tends to be minimised in size and importance). The last in the line is the colliery manager, and he is surrounded by specialists responsible to him; he has, for instance, a safety officer, a surveyor, a timekeeper and storeman, and mechanical and electrical engineers. In theory the Scottish Divisional Board need not accept technical instructions issued by the Production Department at National Headquarters, and lower levels of management right down to colliery manager can protest if they feel that the Production Department has exceeded its authority and has encroached upon policy matters with an instruction upon a technical subject. But in practice it is difficult for the colliery manager to make such a protest. The matter is further complicated by the fact that the Production Department not only issues technical instructions of a general character, but also advises colliery managers on specific problems. Thus, however strongly the National Coal Board reminds its employees that the Colliery Manager's executive powers are as effective as ever, in practice the colliery manager may well discover that work is being carried out in his pit, unknown to himself, upon instructions from a "staff officer" at Area level. And the fact that the colliery manager is liable to receive "advice" from about twenty such "staff officers" is bound to weaken his sense of leadership and authority.

It is doubtful whether under private ownership the manager enjoyed as much authority as the older manager is wont to claim. He certainly enjoyed more authority upon routine disciplinary matters as far as the men under him were concerned, but he never had much control over such matters as capital development. He was, however, free from the activities of specialist officers of all kinds, and the older manager frequently criticises these officials for their high-handed manner, and their occasional habit of short-circuiting the manager's office and giving orders to men theoretically subordinate to him. Sometimes the manager criticises the specialist for his proximity (always wandering around the collieries), and on another occasion for his remoteness. How, for instance, can an expert in London, (a manager asks) be competent to make a plan that covers the geological and other peculiarities of my colliery?

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is claimed for him by the National Coal Board in theory. I have not met a single colliery manager who would dissent from this statement. The manager is thus left with very little power to decide many of the issues which fall within the scope of consultation. This is a particularly serious limitation as far as production matters are concerned. The manager has very little power to share with the workers, and a certain amount of cynicism on their part must be expected if the manager is continually having to confess his inability to accept suggestions without the tedious process of "reference back" to a higher formation. Equally serious is the blow which such procrastination strikes at the manager's prestige.

The argument of one senior National Coal Board official in reply to these observations, is that when a better trained and educated type of colliery manager takes the field a greater measure of devolution will be possible. There will then be less need for specialist advice from all sides; the manager of the future will be so well qualified on technical and administration matters that he will confidently perform many of the duties upon which he at present seeks advice, although there will always be a need for widespread standardisation (e.g., of mechanisation) to reduce costs, as well as central control of such activities as industrial and safety research.

The argument is somewhat optimistic, but the National Coal Board's Ladder Plan (see page 179) goes a long way towards providing for the emergence of a new type of colliery manager whose all-round ability and qualifications will be a better basis for successful consultation. The coal industry, at pit level, needs a man strong enough to claim authority from those above him and not afraid to consult with those below him in the exercise of that authority.

The position of the deputy requires special attention. His authority has been considerably undermined in the last few years; too often he is not consulted over day-to-day decisions in the pit. The local trade union branch, for instance, may arrive at an agreement with the colliery manager upon some comparatively unimportant matter relating to working conditions. The Area Production Manager and the Area Labour Officer have probably expressed their views and helped to reach a settlement. But too often the Deputy only learns of this change from a miner working under him who happens to be an active trade unionist. As one deputy stated to me: "The National Coal Board expects me to be efficient; but I am left to find out things for myself. Why can't I be told what's going on in my own pit? I can't even see the consultative committee minutes without a lot of fuss."

There/
There is need for much more communication downwards. Failure to acquaint the deputy with matters of this kind seriously affects his efficiency and his prestige. Nothing can be more disastrous to relations in the pit than to starve the deputy of information and authority. This position must be strengthened at every point by the fullest consultation and support by management.

That a deterioration in the deputy's position has taken place is implied in a recent speech of the Chairman of the National Coal Board, Sir Hubert Houldsworth:1. "We are still trying to improve the status of under-officials, but it will take more than one year before the advantages of that work can be realised."

The promise of future action does not exonerate the National Coal Board from past blame. More attention paid to the morale of deputies over the last seven years would have strengthened the morale of the industry as a whole.

It emerges, from the preceding survey of National Coal Board personnel, that industrial peace depends more in the long-run upon good management than upon a good labour relations staff. This view is contrary to that of some National Coal Board officials who believe that the technical and human sides of management are two specialist departments of administration. This view assumes that industrial relations can best be improved by setting up properly staffed and equipped personnel departments and by giving the personnel officials equal status with managers, or, at higher levels, with area and divisional production officers.

The ultimate effect of such policy might be that the manager would consider himself exclusively as a technician, and regard himself free of responsibility for "industrial relations". My study of the coal mining industry has led me to the uncompromising conclusion that the manager and the production officials must be as competent in the field of human relations as they are in that of technology. The creation of a labour relations department - and it is not suggested that such a department is not needed - should not relieve the managers of their wider obligations to the industry. Technology, like patriotism, is not enough. I consider that the practice in the Scottish Division of subordinating the labour relations staffs to the production side (in some divisions the labour officers enjoy wider powers than the advisory powers of Scottish officers) is a wise one. Although it has led to friction between the two departments in Scotland it will justify itself in the long run by placing the responsibility for industrial peace (from the National Coal Board's side) firmly/
firmly where it belongs - in the lap of management. Labour staffs should continue to operate as advisors and mediators, but they should not intervene too obtrusively in the management-worker relationship.

This view would meet with support from most of the managers and production officers. Unfortunately, some of them would support it for the wrong reasons. There are managers who think exclusively in terms of "discipline" and regard the intervention of labour officers as designed to weaken their authority. This attitude is too negative. The recognition of the manager's responsibility for good industrial relations involves a willingness to try new ideas, and to work along with rather than against the joint consultative machinery. It also involves the recognition (not universally accepted among managers) that the methods of 1923 are not suitable to 1953. In other words, I would place management before labour relations staffs in order of importance, not because the work of labour officers is unimportant, but because it is too important to be detached from management.

This fact is fortunately recognised by the Scottish Divisional Board. "The National Coal Board stands or falls by its colliery managers", one Board official recently stated. "Give me a good man and I can send him anywhere in Scotland with the sure knowledge that he will put a colliery on its feet... and I don't just mean technically... I am thinking of morale as well."

There is one general question of extreme importance which we should consider before leaving the question of consultation. How far, if at all, should the workers or the trade unions be consulted in appointments made at all levels in the industry?

Before nationalisation there was no question, of course, of such consultation. During the war, however, the Ministry of Fuel and Power appointed union nominees to posts in the Labour Department. These positions were not comparable, however, to administrative posts within the industry; these officers were civil servants although they enjoyed considerable powers under wartime regulations.

The nationalisation act made no provision for trade union representation upon the Boards, or at any other level. It did, however, stipulate that the Minister might appoint to the Board "persons appearing to him to be qualified as having had experience of ... the organisation of workers 2(3)". Although the Minister engaged in informal discussion prior to making his appointments, to say that "consultation" took place would be stretching the meaning of the word.

At/
At a lower level, the National Coal Board rejected outright all suggestions from the National Union of Mineworkers that it should participate in the appointment of pit-training, safety and welfare officers. The decision of the National Coal Board to reserve the right of appointing whom they please has met with approval in some quarters. It has been pointed out that, in any case, the mere appointment of a trade union official does not give the worker any sense of participation in the industry.¹

Those writers who have praised the National Coal Board's stand on this matter have apparently taken at face value the statements put out by the National Coal Board rejecting the union's claim to consultation. In the senior appointments, however, consultation of an unofficial kind does in fact take place. It is well known among a small inner circle of National Coal Board officials that no man who is not acceptable to the National Union of Mineworkers will be appointed for instance to a Divisional Board. Four outstanding candidates for the deputy-chairmanship of one Divisional Board were recently rejected on no other ground than disapproval from the National Union of Mineworkers. In the case of Labour Department appointments there is open cynicism from some non-trade union labour officers that the top jobs are more or less in the gift of the National Union of Mineworkers, although ostensibly the appointments are made by the National Coal Board. In allegations such as these the investigator must remember that disappointed applicants for promotion are apt to make sweeping statements. But on this issue there is good reason to believe, merely by looking through lists of applicants - successful and unsuccessful - that the allegation is true.

It may be argued that consultation with trade unions before making appointments is desirable² and represents a welcome step towards industrial democracy. But if this argument is accepted, the appropriate consultation should surely be carried out in a regular fashion, and with the knowledge of all workers engaged in the industry. Furthermore, it should be made known to Parliament and to the public. The present method is highly undesirable. The secrecy means that a small group of top trade union officials - not the rank-and-file in their unions/...
unions - exercise a right of veto over certain appointments within the industry. It means that loyal officials and workers in the Board's employment have been debarred from promotion to certain appointments for no other reason than the fact that the ostensible qualifications for these posts do not coincide with the unacknowledge requirements.

This secrecy has an even more unfortunate consequence. The National Union of Mineworkers, for instance, is exercising pressure in the making of appointments without accepting any subsequent responsibility for the running of the industry. It has been represented to me that the National Union of Mineworkers has deliberately favoured weak appointments. The claims of forceful and efficient candidates, it has been alleged, have been vetoed by the National Union of Mineworkers, and men have been appointed who would not have reached the short-list in normal selection procedure. In other words, the best candidate in the interests of the industry and of the consumer has not always been the best candidate from the viewpoint of the union - or more specifically, of certain top officials of the union. It is this last feature which invalidates any democratic advantages which this procedure might otherwise have had.

The reply of the National Coal Board to these criticisms would be an official denial that its autonomy in the making of appointments has been in any way undermined. Legally this is incontrovertible. But in practice, as we have seen, the National Coal Board's autonomy has not been as absolute as is imagined by Parliament and the public. Unofficially, the National Coal Board's answer would be that the new relationships with the workers which have sprung up since nationalisation make discussions with the trade unions on all topics desirable. What could be more appropriate than that as many appointments as possible are made with the goodwill of workers in the industry? Is not this yet another road to full partnership and industrial peace? This attitude is in itself commendable. But it can only be successful if the trade unions are honestly concerned to appoint the best men. The unions are certainly entitled to expect that men appointed should take a wide view of the efficiency of the industry - a view that encompasses the need for humane management and the provision of good working conditions and welfare amenities. But if they are prepared only to take a short-sighted and negative view of the other requirements for important positions, the National Coal Board should cease to consult them unofficially upon these appointments. The other alternative is, as suggested above, to devise proper machinery for formal consultation with the unions upon/
upon appointments falling into those categories where management-worker relationships are important. The present method gets the worst of both worlds; it results in weak appointments and leaves the union free from all responsibility for the efficient running of the industry. Yet it is the acceptance by the workers of the responsibility for efficiency which is the most vital aspect of joint consultation.

Before the 1920 Act there were very few welfare amenities, whether environmental, social or personal. There was little attempt to make the colliery a pleasant place at which to work (see page 33) and pithead bathing facilities were rare. The aim of the miner was to get away from the pit as soon as possible after his shift was finished, and take his bath in a tub inside his cottage. The drudgery which befell the miner's wife, with baths to prepare for husband and sons, and pit clothes to dry, can well be imagined. In the nineteenth century the miners had not bathed so frequently. One observer drew attention to "the most incredible prejudice common among the colliers... that they would soiled their backs by washing them... which as many of them therefore never do." Later in the century, however, this superstition had died out, and there were repeated agitations by the miners' unions for pithead baths. It would be a mistake, however, to assume that the agitations of the unions and of the wives of miners' agents expressed the unanimous opinion of the rank-and-file. Even as late as 1958 some miners at Arniston refused to use the pithead baths when they were introduced in that year. One former officer of the Miners' Welfare Commission told me of his frequent propaganda campaigns throughout Fife and the Lothians during the nineteen-thirties, trying (often fruitlessly) to persuade the men to draw upon the Fund for these facilities. At Lady Victoria colliery, for instance, the men turned down the proposal to install baths, and they did not start demanding them until after nationalisation.

Miners are perhaps the most conservative of all workers. Their opposition to pithead baths (where it existed) was based upon a reluctance to change the habits of a lifetime. Some were shy to leave their good clothes in a public place whilst in the pit; others preferred dressing in front of their own kitchen fire rather than in a cold, impersonal public bath-house.

Another/
CHAPTER VI.

Welfare

The machinery concerned with welfare, insofar as it falls within the scope of consultation, has already been examined in the preceding chapter. It is now proposed to consider the changes in welfare amenities in the period under review.

Before the 1920 Act there were very few welfare amenities, whether environmental, social or personal. There was little attempt to make the colliery a pleasant place at which to work (see page 33) and pithead bathing facilities were rare. The aim of the miner was to get away from the pit as soon as possible after his shift was finished, and take his bath in a tub inside his cottage. The drudgery which befell the miner's wife, with baths to prepare for husband and sons, and pit clothes to dry, can well be imagined. In the nineteenth century the miners had not bathed so frequently. One observer drew attention to "the most incredible prejudice common among the colliers ... that they would weaken their backs by washing them ... which so many of them therefore never do."¹ Later in the century, however, this superstition had died out, and there were repeated agitations by the miners' unions for pithead baths. It would be a mistake, however, to assume that the agitations of the unions and of the wives of miners' agents expressed the unanimous opinion of the rank-and-file. Even as late as 1938 some miners at Arniston refused to use the pithead baths when they were introduced in that year. One former officer of the Miners' Welfare Commission told me of his frequent propaganda campaigns throughout Fife and the Lothians during the nineteen-thirties, trying (often fruitlessly) to persuade the men to draw upon the Fund for these facilities. At Lady Victoria colliery, for instance, the men turned down the proposal to install baths, and they did not start demanding them until after nationalisation.

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Another/

Another welfare amenity that was almost unknown was canteen feeding; at Arniston, for instance, there was no canteen provided until after nationalisation.

In such activities as sport and recreation, however, the miners at Arniston were taking a lively interest long before the 1920 Act. Their Miners' Institute dated from 1912, and they were active in Pipe Bands as early as 1909. The money for these activities came largely from their own pockets, from the colliery management and from the Dundas family. Similarly, whatever private welfare service existed (sick visiting, advice on family problems, etc.) was largely the responsibility of Lady Dundas or the Manager's wife. It was not until after nationalisation that anyone was paid to perform this kind of work, and the informal philanthropy of a Lady Dundas or a Mrs. Lithgow became the routine duty of a Sub-Area Labour Officer of the National Coal Board.

In the sphere of housing Midlothian colliery owners enjoyed a comparatively good record from the mid-eighteenth century onwards.

Reporting to Parliament in 1849 a Commissioner stated: "In the Lothians, where new colliery houses have been built, they are of a much-improved kind, as at the Marquis of Lothian's, and some excellent specimens on the property of the Duke of Buccleuch ... The houses are occasionally inspected, and those families who neglect the opportunity of living in decency and cleanliness are threatened with dismissal from the works. Excellent gardens are attached to the cottages, and also ground for recreation." 1

These observations were supported by the "Weekly Scotsman" twenty years later: "The houses provided by the Duke of Buccleuch for the men employed in the Dalkeith Colliery, though built a considerable time ago, have few equals. They are well constructed and commodious ... all have two or more apartments and are supplied with water and water-closets. Large spaces of ground are attached to the houses, and may be used for drying clothes or as a playground for the children ... The Marquis of Lothian owns two hundred and sixty miners' houses, among which are to be found some of the best of the kind in Scotland, together with some of the worst. The Newbattle Colliery, with which they are connected, is one of the oldest in the country ... The earliest houses of the miners were miserable thatched hovels; but all the houses built within the past thirty or forty years are of a superior description ... Only a few cottages of the very old type remain, and the dwellings by which they are being superseded are/

1. Report of the Commissioners appointed under the provision of the Act. 5 & 6 Vict. c.99. to enquire into the operation of that Act and into the State of the population in Mining Districts. 1848. HMSO. Page 20.
are very comfortable and commodious, some of them containing four or five apartments. The rooms, though small, are lofty and well-ventilated. The walls are of brick, the floors of glazed tiles, and the roofs of slate."

These housing conditions were certainly above the average for Scottish miners at this time, and conditions in Lanarkshire were far worse. Housing conditions in Ayrshire and Kinross-shire were among the worst in Great Britain; in Kinross-shire miners' families were living in hovels erected on bare earth until as late as 1911. (Extracts from the Housing of Miners in Ayrshire and Kinross-shire) 1.

Improvements were made in the Arniston and Newtongrange area between 1910 and 1914. In those years sixty and ninety-one houses were built respectively in Arniston and Newtongrange. These houses contained two rooms, kitchen, scullery, and a bathroom, and the Newtongrange houses were described by a local trade union official 2 as "probably the best houses built for miners in Scotland."

In 1924 and 1925 the Arniston Coal Company made sweeping changes to Arniston village. Old low-roofed cottages were demolished and new two-storey buildings (containing three or four rooms and bathroom) were erected. Thirty-six houses were built at Arniston, eighteen houses had improvements made, and thirty-four had bathrooms added. Electric lighting was supplied.

The Lothian Coal Company, Limited, built one hundred and forty-four new type houses at Newtongrange in 1924, and a further eighty-three in 1925. "In those days", I was told by a former resident of this area (Mrs. Lithgow), "Newtongrange was a model village, and was visited by officials of companies from all over the country."

Housing in this area, although not always as good as the examples cited above, provided an exception to the general indictment of housing in Scotland by the Samuel Commission 3 and by the Sankey Commission 4. There were few improvements, however, between 1925 and the outbreak of war. What improvements there were did not offset the resentment of miners against the system whereby the manager could evict them and their families, in event of dismissal. "I was often upset when my husband dismissed a man", Mrs. Lithgow told me. "I probably knew his wife and family well, and they would plead with me to intercede/
intercede ... but of course, there was nothing I could do. They had to leave their house." Many miners, for their part, believed that the colliery company invested in houses for their employees as an additional weapon in strike-breaking, and this opinion took the edge off any gratitude they might have felt for housing improvements.

An even more serious grievance among the men was the policy of the company in evicting widows, unless any remaining member of the family residing at home was employed in the pit. There was considerable indignation at Arniston, for instance, over the eviction of a woman whose husband had been killed in a colliery accident.

The colliery companies remained responsible for housing (where they decided to build accommodation for employees) even after the passing of the 1920 Act setting up the Miners' Welfare Fund. Although the purposes of the Fund, as defined by that act, were the "social well-being, recreation and conditions of living" of miners, the act expressly excluded housing. Presumably it was felt that, in the controversies over housing policies immediately after the First World War, the question was too big to be tackled in legislation concerned with miners' welfare. In any case, the Welfare Fund was far too small in amount to be able to finance the housing requirements of the Mining Industry.

Nevertheless, the importance of good housing to the general welfare of the miners was re-emphasised in 1942 by the Forster Committee on the Recruitment of Juveniles in the Coal Mining Industry: "We draw attention to the need in certain mining districts for improved housing conditions for the lasting betterment of the social conditions of the mining population. It has been represented to us that the poor housing conditions which prevail in certain districts are detrimental to the industry from the standpoint of recruitment. Where the need for improved housing conditions is established we regard the raising of the standard of housing as of prior importance to the provision of leisure-time social amenities.""2

Few would dispute that welfare really begins in the home. Yet the Miners' Welfare Committee (and later, the Commission) can hardly be blamed for failing to solve a problem which was so manifestly beyond its capacity. It did its best to provide amenities which gave the miners opportunities of better conditions outside the home, and there was no lack of demand for its resources and energies.

The

The establishment of the Miners' Welfare Fund in 1920 was a considerable step forward. Although its income was only about £1,000,000 yearly, it played a useful part in helping to meet the higher standard of life which miners were demanding after the First World War. In the first five years of its life (the Fund was extended for a further period for five years by the Mining Industry (Welfare Fund) Act of 1925) 67% of the amounts allocated from the district funds were for purposes connected with recreation, and 31% for the purposes connected with health, including pithead baths.

The Four Final Reports of the Coal Industry Commission had recommended that suitable bathing facilities should be provided. In most European countries at this time the compulsory provision of pithead baths was fairly general. In Germany such facilities dated from the beginning of the century, although the laws in all the German states had not been uniform in their stringency. In Belgium the provision of baths had been made obligatory by a Royal decree which came into operation in 1913. In France the provision of bathing facilities was compulsory in the larger mines, its use by the men being optional.

Legislation covering pithead baths in Britain had, as we have seen (see page 140) been ineffective. The Miners' Welfare Committee, with its limited resources, was not in a position to secure the general adoption of bathing facilities, but it secured their establishment in selected places, hoping thereby to stimulate their adoption elsewhere. There was a temporary suspension of this policy in 1924, when a Bill was introduced by the Labour Government, requiring every owner within a period of three years to provide sufficient and suitable bathing accommodation and drying facilities at the pithead. The Secretary of State for Mines was empowered to exempt any mine where, owing to lack of water or for other reasons, it was not reasonably practical to provide baths, or where the coal seams were likely to be exhausted in a short time.

The Miners' Welfare Committee suspended allocations for pithead baths in anticipation that under this Bill provision would be made for the expenditure involved from sources outside their own Fund. The Bill, however, never became law, and the Committee resumed the practice of allocating money for bathing facilities. Nevertheless, by the time of the 1925 Act bathing facilities had been made available for only some 20,000 men, or roughly 2% of the total manpower of the British Coal Mining Industry. More money was made available for pithead baths, however, in 1927 (see page 140) by the imposition of a levy on coal royalties.

By/

2. Ibid.
3. Ibid.
By 1938 the receipts of the Fund stood at a total of £17,321,232 and grants paid amounted to £16,386,706. For the year 1938 receipts stood at £819,458 and grants paid at £1,264,302 (the excess of £444,844 being met out of balances). The way in which the receipts of the Committee were appropriated to local purposes, general purposes, and pithead baths was fixed by law. The Central Committee had to appropriate for pithead baths the receipts of the royalty levy and a sufficient part of the output levy receipts to make up £375,000 annually, which was credited to the Baths Fund. From the balance of the output levy receipts of £20,000 had to be allocated for research, and the remainder appropriated, four-fifths to the District Fund for local purposes and one-fifth to the General Fund. The District Fund was sub-divided into twenty-five parts one for each coalfield district in proportion to the contributions received from the District. Thus, in 1938 the District Fund received £327,106 (40% of the total receipts), the General Fund took £117,352, including the £20,000 for research (14%), and the Baths Fund received £375,000 (46%). It was estimated that over 400,000 miners at 313 collieries had pithead bathing facilities by the end of 1938. The average cost of bathing installations was £2:12:- per year per person and 93% of workmen at these collieries used the facilities. Contributions from the men amounted to 6d. per week each at 4% of the baths, less than 6d at 38%, and more than 6d at 13%. Colliery owners contributed to upkeep at 71% of the baths. The Miners' Welfare Fund could not hold itself responsible for baths repairs and renewals reserves nor for such items as the cost of heating and the wages of attendants. This expenditure was the responsibility of local management committees who were warned to set aside reserves for these purposes.

With regard to canteens it was necessary to secure a grant from the District Fund if a canteen were required, but in 1934 the Central Committee decided that whenever building baths in the future they would provide a canteen at the cost of the Baths Fund if the local workers desired one. This led to an increase in the number of canteens erected. In 1938 twenty-eight canteens were included in the contracts signed for building thirty-five new baths. Similar provision was made for the erection of cycle stores at baths installations.

By 1938, £5,618,515 (32% of the Miners' Welfare Fund) had been spent on schemes for recreation, physical culture, and the amusement of Mining Communities.

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5. Ibid. Page 16.
6. Ibid. " 17.
Most of it came from the District Fund (upon the recommendation of district committees) any by 1938, 1,400 schemes had been launched for parks, recreation grounds, pavilions, village football fields, halls (containing libraries, billiard rooms, gymnasium, dance-halls, etc.) or more modest general-purpose huts), and the average total grant per scheme had been nearly £4,000.1. Holiday centres had long been a topic of discussion among miners' unions, but by 1938 the only district to be at the stage of considering plans was Derbyshire. It proposed a holiday centre for miners and their families at Skegness (at a capital cost of £40 per miner) with a charge of 8/- weekly for adults and 4/- for children.2. Although over £80,000 had been spent on Aged Miners' Homes, only three districts in England - Northumberland, Durham and West Yorkshire - were participating in this particular scheme.

Other welfare expenditure included health schemes and convalescent homes (14 for the country) at a total cost of £2,086,021, and Safety and Health research which by 1938 had accounted for £1,024,694.

The pattern of welfare expenditure varied from district to district. The following table shows how grants were allocated in the Lothians District between 1921 and 1938:

<table>
<thead>
<tr>
<th>Grants</th>
<th>Number of Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>£128,149</td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Convalescent Homes</td>
<td>500</td>
</tr>
<tr>
<td>Hospitals</td>
<td>1</td>
</tr>
<tr>
<td>Ambulances</td>
<td>30</td>
</tr>
<tr>
<td>Nursing</td>
<td>1,924</td>
</tr>
<tr>
<td>Special Medical Treatment</td>
<td></td>
</tr>
<tr>
<td>Pithead Baths</td>
<td>2,411</td>
</tr>
<tr>
<td>Canteen</td>
<td>2,281</td>
</tr>
<tr>
<td>Cycle Stores</td>
<td>4,281</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>400</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>952</td>
</tr>
<tr>
<td>General</td>
<td>539</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>3,259</td>
</tr>
<tr>
<td>Total allocated</td>
<td>£144,763</td>
</tr>
<tr>
<td>Balance unallocated</td>
<td>50,463</td>
</tr>
<tr>
<td>TOTAL RECEIPTS</td>
<td>£195,226</td>
</tr>
</tbody>
</table>

2. Ibid. Page 19.
3. Ibid. " 120.
It is interesting to note that the miners in the Lothians district favoured such items as recreation from their limited resources rather than, say, pithead baths. In 1938 the District Committee decided not to accelerate the building of pithead baths "in view of the requirements of the District for other welfare purposes." This preference is borne out when we examine the expenditure of a similar district (from a financial viewpoint), Ayrshire. Of a total of £183,218 over the same period (1921-1938) Ayrshire District spent £34,046 on pithead baths.

Nevertheless, in recreational and general welfare provision, the Lothians could boast of considerable achievement between 1921 and 1938. They had constructed 21 institutes (including libraries, with books supplied by the local and education authorities), 8 parks. Beautiful parks in the most unexpected mining villages were indeed a feature of this area, and owe their existence to the Miners' Welfare Fund initially, although three of them were handed over to the District Councils for future maintenance. Colliery bands were also assisted by the committee; in 1938 a total of £799 was given to four bands in the area. Not only did these bands increase the welfare of the miners but they "provided much appreciated entertainment to the whole community." Between 1921 and 1938 the Lothians District granted £1,924 to nursing services, and £500 to the Edinburgh Royal Infirmary Extension Fund. Each mining village in the area assisted in the maintenance of a nurse.

Early in 1945 the Miners Welfare Commission began to make plans for recreation and general welfare amenities when peace came. It recommended a short-term plan aiming at (a) the immediate development of additional activities at Miners' Welfare Centres, having regard to local needs and to the accommodation or facilities which were either already available or could be quickly made available by minor repairs or improvisation, and (b) the post-war reconditioning of buildings, and grounds. The long-term plan related to developments when building became again practicable.

The Commission arranged early in 1946 for District Officers to undertake detailed surveys of all existing recreation centres and of industrial and housing developments requiring to be taken into account. The proposal was that when constructional work was again permissible comprehensive community centres would be developed at suitable points, and round them, suitable schemes of the village/1.

2. Ibid.
It was thought that the small village hall scheme would meet the primary welfare needs of small communities, who would come together at the large centre for joint activities and bigger gatherings.

Let us pause to examine the situation on the eve of nationalisation. An ally in the provision of leisure-time amenities had entered the field in 1944. This was the Ministry of Education which, under the 1944 Act, had charged local education authorities with duties in this direction, while directing them to have regard to the expediency of co-operating with any bodies whose objects included the provision of facilities or the organisation of activities of a cultural and educational nature. Consequently, one of the last recommendations of the Commission before nationalisation was to recommend management committees to "seek the co-operation of their local education authorities. Admission of local residents (to the centres) who follow some other calling than mining would no doubt be a condition of assistance of local authorities. This is in any case recommended by the Miners' Welfare Commission both to strengthen the membership, to break down social prejudice, and to afford opportunities for mineworkers to meet people with fresh interests. In order to legalise their admission to membership a provision was included at the Miners' Welfare Commission's suggestion in the Coal Industry Nationalisation Act, 1946, empowering the Ministry of Fuel and Power to make the necessary variations of the trusts of miners' welfare schemes in suitable instances ... There is of course no implication whatever that miners' welfare centres should be taken over by local authorities, so long as the miners desire the centres and are able to conduct them well. On the contrary, the local authorities may look to the centres to assist by taking a place in the general scheme."¹

The efforts of the Commission in 1946 to persuade management committees by circulars, letters, pamphlets and visits by officials, to extend their activities is an indication that these committees had not previously been doing much in the way of "purposeful" activities. There was obviously a need for more varied and educative activities, for the provision of more youth club facilities and for bringing wives more into the social life of the institutes. There was scope for more drama, literature, discussion groups, handicrafts, home nursing, keep-fit classes and household subjects. Previously, management committees had conceived their function to be confined to maintaining the buildings and grounds, whilst leaving it entirely to the members to organise themselves. This had led to/

to little more than the organisation of indoor and outdoor sports in many centres. There was an attempt in Scotland in 1946 to "re-educate" management committees. Three courses of three week-ends each were held for management committees and secretaries, to give them a broader view of their functions. One in Fife was attended by 32 men and 7 women from 20 centres; in Lanarkshire by 33 men and 17 women from 16 centres; and the Lothians course was attended by 28 men and 7 women from 13 centres. The courses were organised by the local education authority with the co-operation of the Miners' Welfare Commission and the Scottish Education Department (all three sharing expenses).

But the Miners' Welfare Commission, while exhorting miners to broaden their horizons, was not apologetic about its record over twenty-six years. Summing up its achievements in the pre-nationalisation era it stated: "At the outbreak of war, which put a stop to building and constructional work ... the stage had been reached at which all the principle communities in most of the coalfields had accommodation of some sort for a centre of communal social life, where individuals might meet together for games and pleasurable exercise, outdoor and indoor, a place for social gatherings, hobbies and cultural pursuits." Altogether, by 1945, £5,994,879 had been spent by the Commission upon 1,523 centres.

Pithead baths built under the Miners' Welfare Fund were handed over to charitable trusts, the trustees being appointed in equal proportions by the colliery owners and the workmen. In 1944, at the request of the Ministry of Fuel and Power, the Joint National Negotiating Committee of the industry met in November to discuss the question of regulating the payment of contributions by owners and workers. Practice in this respect varied from colliery to colliery. Eventually, in August 1944, the employers side put forward a proposal following Section 77 of the Coal Mines Act, 1911, that "apart from the cost of soap and towels which should continue to be borne by the workers, the total running costs of the baths should be ascertained in each case and this cost should be borne equally by the owners and workmen. Where arrangements have been entered into which might give better terms to the workmen they should be continued." The workers' side of the Committee accepted this proposal subject to a proviso that in discussions with the Minister in regard to welfare generally they should be free to advocate that all pithead baths expenses should be paid out of the Welfare Fund. The Mining Association and the National Union of Mineworkers endorsed the proposal with effect from September, 1945.

Although

Although this arrangement was an improvement upon the old practice of negotiating the owners' contribution with regard to each installation separately, it still left for local decision the bases upon which the running costs should be computed (for example, the prices of steam fuel, electricity and water supplied by the colliery). It still left the possibility of variation between one colliery and another in the rate of the employee's subscription.

A pithead bath was officially opened at Arniston (Gore) Colliery on 25th February, 1938, providing accommodation for 570 employees. This innovation came just in time. Pithead bath construction was suspended throughout the war, and fewer than half the miners in the country enjoyed these facilities before 1945. Some of the older miners at Arniston, however, still refused to use the new baths, but their introduction was welcomed by the great majority. Even among the supporters, however, gratitude was not unanimous. I asked one retired Arniston miner what he had thought about the innovation in 1938. "Forty years too late", was his laconic reply. The miners at Arniston paid a contribution of ld a week for a year before the baths were built. When the baths came into operation the men paid 6d weekly, and this was later increased to 9d and subsequently to 10d. Contributions stopped after nationalisation.

Although pithead bath construction suffered a setback through the outbreak of war (the building programme was closed down on July 1st, 1940), there was one welfare amenity which assumed importance because of war conditions. This was the pit canteen. The introduction of rationing led to complaints by miners in 1940 and 1941 that the standard civilian ration was insufficient. Their claim could have been met in either of two ways; the Government could have provided special rations for them to eat at home, or provided extra food at their place of work to be consumed in pit canteens. The Miners Welfare Committee wanted extra supplies of food for miners to be obtainable at their homes, and the National Union of Mineworkers made repeated representations to this effect to the Government. Public opinion, however, did not seem to favour differential rations for privileged workers and their families, so the second alternative was chosen by the Government. In 1941 the Secretary of State for Mines requested the Miners' Welfare Commission to set up pit canteens wherever possible. Furthermore, the Essential Work (Coalmining Industry) Order imposed:


imposed upon collieries the obligation to provide canteens for employees. It was not until after the establishment of the Ministry of Fuel and Power, however, that plans got under way. The Miners' Welfare Commission assumed the initial capital outlay on building the canteens, but adopted the same policy as it had used with regard to pithead baths in refusing grants towards operation or maintenance. The Commission's architects and other staff were called in to advise on planning and equipment and the Commission took steps to obtain the release of labour and materials. The Commission provided £2,500,000 for canteens, which were to be managed on a non-profit basis by committees of employers and workers throughout the industry. The Commission's canteens were soon disposing of 15,000 tons of food a year, and their annual receipts amounted to £6,750,000 or £3/11½ per week for every person employed in the industry.

Although it now was possible for miners to eat in greater comfort the canteens were not, however, as successful as the Miners' Welfare Commission officials had expected. They were surprised to find, for instance, that more unmarried men than married took their meals at the canteen. The traditional conservatism of the older miner made him more reluctant to change his habits - even in order to reduce his wife's difficulties with food - than heavy workers in other industries. Working conditions also made it difficult to take meals at the canteen; the miner could not, for instance, take a canteen meal in the middle of a shift when he was working far below the surface of the earth.

The habit persisted, also, of wishing to get home as soon as possible when work was finished. The miner's bus or train probably started soon after the shift was over, and the man who went to the canteen for a hot meal was in danger of missing his transport.

There were, of course, many collieries which lacked canteens all through the war period; with the best will in the world, the Miners' Welfare Commission could hardly supply the entire industry. Arniston Colliery, for instance, did not get its canteen until after the war. But it is doubtful whether lack of canteen facilities was ever a major grievance with the miners in this area. The miner - and particularly, perhaps, the Scots miner - is a primarily keen family man who likes the company of his wife and children when he takes his meals. Whereas in most industries the canteen had met the social needs of men at their place of work, in the coal industry this need had largely been met in the pithead baths. With a loudspeaker giving forth dance music in the background, the pithead bath was the centre of gossip of the day on sport, politics and "shop". The National Union of Mineworkers never seemed to show undue enthusiasm for/
for canteens. Its chief concern was to get higher domestic rations, but its representations were finally rejected by the Minister of Fuel and Power, the Rt. Hon. E. Shinwell, in December, 1945.

Further evidence of the miners' lack of enthusiasm for canteen feeding was supplied by the Scottish Coalfields Committee in 1944: "Where canteens have been built they are not as well patronised as could be wished ... when the canteens are as long established as the baths it is the general view that they will be equally well patronised, and we think that if the miners who at present ignore the canteens were to sample the fare provided they would soon become regular customers."¹

Events were to prove, however, that the Committee had underestimated the strength of the miners' traditional feeding habits, and that his lack of enthusiasm for this particular welfare amenity was not to vanish as quickly as anticipated.

A novel method of feeding was introduced in Midlothian during the war. This was the serving of hot meals underground. Sir David Robertson, M.P., introduced a scheme at his colliery at Newbattle (the Easthouses pit) for enabling the men to take their meal at the coal face. The meals were prepared at the surface and taken underground by the miners in insulated containers. The form of the container was a quart size "thermàs" jar fitted with a metal dish for the pudding, and the whole container held a complete meal for one person. Sir David urged the universal adoption of his scheme, and secured the support of the President of the Board of Trade (Sir Andrew Duncan). Sir Andrew agreed to press the Miners' Welfare Commission to introduce the scheme in other collieries, and they finally consented, somewhat reluctantly, to launch an experiment at four selected collieries. Lingerwood and Lady Victoria, two Midlothian pits, were among those selected. The experiment lasted six weeks, but it was found that very few miners would take a hot meal underground. The men found the dust and general discomfort of eating too great, and preferred their traditional "snap" while at the coal face.² Sir David's suggestion cost the Miners' Welfare Commission £4,485 (the amount lost over the six weeks' trial), and no more was heard of it.

Post/

Post-Nationalisation

The Coal Industry Nationalisation Act of 1946 laid down that "the policy of the Board shall be directed to securing, consistently with the proper discharge of their duties under subsection (1) of this section ... the safety, health and welfare of persons in their employment." The "proper discharge of their duties" referred, of course, to the main objectives of the Act; the working and getting of coal, the efficient development of the industry, and the supplying of coal at prices calculated to further the public interest.

The Board was also directed to enter into consultation with "organisations appearing to them to represent substantial proportions of the persons in the employment of the Board" on questions relating to the safety, health or welfare of such persons. These, then, were the two clauses which made the promotion of welfare the statutory responsibility of the National Coal Board.

The Miners' Welfare Commission as reconstituted under the nationalisation act (see page 158) inherited the two statutory levies, one of a penny on every ton of saleable coal produced and the other of a shilling on every £1 of (notional) royalty. An income of £1 million a year was yielded by these levies (including income from investments). After nationalisation, however, there were certain important changes. The National Coal Board announced that it would add an additional twopence a ton on saleable output of coal (making a total of 3d) and this additional income, amounting to £1½ millions per annum, was devoted to capital expenditure on pithead baths, canteens, and ancillary buildings. This expenditure, according to the National Coal Board, represents about 1½d per ton. The National Coal Board also agreed to meet expenditure amounting to more than £2 millions a year for the management and maintenance of pithead baths, the improvement of existing canteens, medical facilities, and other welfare services. Pithead baths had formerly been maintained, as we have seen, from equal contributions from employers and employees. The assumption of this obligation by the National Coal Board (April, 1947) meant that mineworkers were relieved of payments ranging from 2d. to 1/- per week. The workers still had to provide their own soap and towels, however.

The new national Joint Council decided to spend, or enter into commitments to spend, up to a total of £9 millions on new baths and canteens up to the end of 1951. The money was divided among the divisions in 1948; each division shared/

2. Ibid. Section 46(1)(b)
shared in the sum mainly according to the number of miners for whom no baths had yet been provided, and by the end of 1949 building programmes had been settled. These programmes took into account, of course, how far the future of particular collieries would be affected by the large-scale reorganisation of the coalfields. It would be uneconomic, for instance, to build baths at a colliery which was likely to close down in a few years.

The Joint Council found it more expensive to build pithead baths than before the war. Whereas a bath for 1,200 men had cost £14 a man in 1939, it cost £41 in 1949. The Joint Council tried to meet this difficulty to some extent by recommending the cutting down the numbers of cubicles, reducing the height of cubicule walls and by using cheaper materials for the partitions instead of glazed bricks. Among other economies introduced was a new type of shower-arm (easier to install and more convenient to use). There were protests, however, by the men against some of these economies. In many areas, for instance, the men strongly preferred the enclosed shower, and insisted upon a higher number of cubicles.1 The Council agreed to accept the decisions arrived at in this respect through the consultative machinery. Divisional Committees were, however, recommended to adopt very simple designs and specifications for collieries not expected to last longer than 25 years. For these collieries prefabricated baths (which can be taken down and used again) were recommended, although it was stressed that facilities would still be adequate and much higher, for instance, than those provided in military camps. The bath accommodation provided for the troops was declared as "inadequate for the requirements of miners".2 There was no parsimony, for example, in the provision of ancillary amenities such as lockers and drying facilities. The procedure for the mineworker, in the normal pithead bath, is to enter the bath building (on his arrival at work) at the "clean" entrance, undress and leave his day clothes in his "clean" locker. He takes his soap and towel and walks to the other end of the bath, where he gets his pit clothes out of his "dirty" locker and puts them on. He leaves his soap and towel there, greases his boots on a special machine, fills his water-bottle, and leaves the building by the "dirty" entrance to start his shift. When the shift is over, he returns through the "dirty" entrance and cleans his boots. Even this last item is performed without effort upon a mechanically revolving boot brush. The next step is to proceed to the showers, having deposited his pit clothes in the "dirty" locker.

After/
After the shower, he goes to the clean locker where he dresses in his day clothes (the towels and pit clothes are dried in the lockers by a current of hot air), and he leaves the pit as clean and tidy as an office worker. If he wishes, he can stop at the canteen (adjacent to the "clean" entrance) for a snack or a hot meal. When he arrives home, he no longer tramples in, covered in pit dirt, disorganising the household while he bathes in a tub, and the miner’s wife is free from the dirt and stench of steamy pit clothes drying by the fire.

The miner is still reluctant, however, to change his habits to the extent of entrusting all his laundry to a communal service. An experimental laundry was started during 1949 but it had to be withdrawn at the end of the agreed six months’ trial period in May 1950. Costs of the service had been worked out upon the assumption that a minimum of 250 men would take part at the selected pit, but in fact not more than 75 men ever participated at one time.

In 1949 the National Coal Board decided to meet the cost of baths at new and reconstructed pits. This cost was additional to the £90 million already placed at the disposal of the national Joint Council.

The following table shows the number of baths in use at the end of each year from 1938 to 1939 and from 1946 to 1951:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER OF BATHS</th>
<th>CAPACITY (Thousand men)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938 (end)</td>
<td>313</td>
<td>400</td>
</tr>
<tr>
<td>1939</td>
<td>345</td>
<td>430</td>
</tr>
<tr>
<td>1946</td>
<td>366</td>
<td>444</td>
</tr>
<tr>
<td>1947</td>
<td>370</td>
<td>448</td>
</tr>
<tr>
<td>1948</td>
<td>377</td>
<td>453</td>
</tr>
<tr>
<td>1949</td>
<td>394</td>
<td>462</td>
</tr>
<tr>
<td>1950</td>
<td>433</td>
<td>479</td>
</tr>
<tr>
<td>1951</td>
<td>436</td>
<td>502</td>
</tr>
</tbody>
</table>

Although the Miners' Welfare Commission had issued pamphlets in pre-war days advising management committees upon the supervision of baths, and the nature of attendants' duties, it was not until after nationalisation that training courses were established for pithead baths superintendents. These courses were held at the Nuneaton staff college at monthly intervals. In 1948 a total of 235 students attended, and in 1949 a total of 239.

There/
There were changes, after nationalisation, in the canteen services provided for miners. In 1946 the Ministry of Fuel and Power set up a catering organisation which took over from the Ministry of Food the duties of improving canteens by providing money and advice. This responsibility was transferred to the National Coal Board, but until June 1947 the catering organisation of the Ministry of Fuel and Power continued to function as agents of the National Coal Board. After that date, the staff and functions passed to the National Coal Board. The canteens were usually in poor condition, their erection dating from the war-period when all building was done under austerity standards. The National Coal Board spent £100,000 during 1949 on improving those canteens built during the war, and it constructed 24 new canteens during 1950.

It was the view of the National Coal Board that efficiency would be best served if canteens committees were made responsible for paying their own way, although as we have seen, the National Coal Board accepted responsibility for "capital" improvements. The cost of deferred repairs and current maintenance costs were, however, left to the canteen committees.

To improve the standards of canteen management, routine inspections by the National Coal Board's catering officers (attached to the Divisional Boards) were arranged. Management committees were advised to apply for the services of the Divisional catering officer for a week or more, if their canteen was not functioning very successfully. This officer would descend upon the colliery, to reorganise the canteen, recommend improvements in the variety and quality of meals, hygiene, record keeping, stores organisations, and control of income and expenditure, and staff organisation and training.

In spite of all these encouragements to use communal feeding facilities the miners remained surprisingly aloof. It had become obvious by 1950 that the pegging of food subsidies, the more plentiful supplies of food available, de rationing, and the withdrawal of housewives from industry had resulted in a reduction of the number of men using pit canteens (especially for the full-meal service). Pending an investigation of the problem the Council decided in June 1950 temporarily to suspend the building of new full-meal canteens at the cost of the Miners' Welfare Fund, and they invited Divisional Welfare Committees, in consultation with divisional boards, to submit their views about the future of full-meal canteens generally, and whether they considered that "snap and Snack" canteens should be substituted for full-meal canteens during 1948 to 1951. In December/

3. Ibid. " " " " 5.
4. Ibid. " " " " 6.
December 1950 the National Miners Joint Welfare Council agreed in the light of advice from Divisional Welfare Committees that there should be a new standard type of canteen. The main differences between this type and the old was that the size of the kitchen and customer space was reduced to compensate for the smaller number of persons taking full meals (about 5% against 20% of the miners on the largest shift). The new type provided a normal "snap and snack" service plus a small provision for full meals.

In Scotland the number of canteens in operation fell from 137 in 1948 to 87 by the end of 1952. The canteen at Arniston was among those closed down, but when the pithead baths are extended (as is planned) a modern type canteen will be built there. The Divisional Colliery Welfare Officer for Scotland, Mr. J. Herd, confessed that the miners "just don't seem to bother" with hot meals or the canteens in Scotland.

So, in spite of all the efforts of well-meaning dieticians and catering officers, in spite of all the efforts of the Miners' Welfare Commission, the Ministry of Fuel and Power, Sir David Robertson, M.P., Sir Andrew Duncan, the Joint Council, the Ministry of Food, the Scottish Coalfields Committee and the National Coal Board, the miner still prefers a hot meal cooked by his wife. The miner's intransigence in this matter would surely have annoyed that arch-apostle of communal cooking, Charles Fourier.

With regard to recreation amenities, the National Miners Welfare Joint Council inherited from the "old regime" halls, institutes and recreation grounds provided by the Miners' Welfare Fund at a cost of £6,000,000. During 1948 grants of £102,878 were made from the District Fund to 276 schemes, mainly for redecorating and reconditioning. In the following year grants of £156,307 were made to 399 miners' welfare schemes.

The emphasis in the Lothians continued to be on recreational welfare amenities. For instance, in 1948, £4,262 was spent in this way out of a total of £4,822; in 1949, £5,189 out of a total of £13,468; and in 1950, £6,537 out of a total of £6,648. The reason for the disparity in the 1949 figure is to be found in the provision of a convalescent home at a cost of £8,000. This home was opened at Whatton Lodge, Gullane, for the benefit of Lothians miners.

In 1949 the term "social welfare" makes its appearance for the first time in the annual report of the Joint Council and this classification was to serve/

serve as the basis for a large new organisation three years later. The aim of the Joint Council was to associate local authorities and other bodies much more closely with the miners' recreational and cultural amenities, an objective which had been made possible, as we have seen, by the passing of the 1944 Education Act. There were informal and formal discussions at all levels, but in 1949 the local authorities had only advanced £31,743 in response to the Joint Council's request for a total of £95,000.1

More ambitious plans were afoot, however, in Scotland. The importance of co-operation between the bodies responsible for miners' welfare and the public authorities which had been charged by statute with responsibility for the welfare of the whole community was thrown into relief by the development of the new coalfields. There was a large scale migration of miners and their families mainly from Lanarkshire into Fife, the Lothians and Ayrshire. These people had lived in long-established mining communities with their miners' institutes, recreation grounds and other amenities. Now they were expected to enter new territory, involving a complete upheaval of their traditional way of life. The problem of settling down was made more difficult by the absence of comparable amenities in the new surroundings. Consequently the Scottish Divisional Board of the National Coal Board and the Divisional Welfare Committee of the Joint Council prepared a three-year programme of the most urgent development schemes at a cost of £439,000. The Secretary of State for Scotland and the local authorities concerned were asked to co-operate, and discussions are still going on.

On the 1st July 1952 the Coal Industry Social Welfare Organisation took over responsibility for the development of recreation centres, grounds, libraries and all the social and cultural activities concerned with the miner in his capacity as a citizen.

One of the most striking features of welfare in the Scottish coalfields has been the virility, since nationalisation, of dramatic and cultural groups. In 1947 the Miners' Welfare Commission arranged for the Arts Council of Great Britain, in collaboration with District Committees to initiate various cultural activities. In Scotland a drama festival was established as an annual competition under the auspices of a Divisional Drama Sub-Committee. In 1948 28 teams entered, and the winner was the Shotts Drama Guild with its production of "Campbell of Kilmhor". By 1950 32 teams were competing annually, and in October of that year a residential training course in play production was held at the Falkirk miners' hostel.

In/

In 1949 an "Art by Miners" exhibition was held in Glasgow. Four exhibitions were held in Fife and Clackmannan, and they were attended by about 200 people a day.

There was also a drive to increase youth activities after nationalisation, although some youth clubs were inherited from the previous era. The Miners Welfare Youth Scheme in Fife, for instance, had been running 26 youth clubs since the beginning of the war.

This scheme had been started by Mr. J. Herd, Fife District Secretary of the Miners' Welfare Commission (1936-1939) and now Scottish Divisional Colliery Welfare Officer of the National Coal Board. "In the first instance", Mr. Herd told me, "I was dealing with rather husky fellows. By the time I was finished I had got them interested in country dancing, art, dramatics, and fencing."

The Fife County Council had taken an interest in the scheme, and contributed £900 per annum, considerably more than most authorities were prepared to grant towards miners' youth work. In the Lothians, however, a youth scheme was not developed until after nationalisation, five clubs being brought into existence.

In 1948, there was a rally of miners' youth clubs held at the Carnegie Youth Centre, Dunfermline. In 1950 a new youth centre was opened at Bowhill, with a membership of 207 boys and 116 girls. A party of boys from Holland visited Fife in 1950 as the guests of the Divisional Coal Board and the Miners' Welfare Youth Council. In addition to a sightseeing tour they played football matches against six local teams.

These are but a few of the important events in the welfare services for young miners and for the families of miners since nationalisation. No doubt the value of these amenities (which still, for a large number of young people, provide somewhat uncreative recreation) is exaggerated by the Divisional welfare spokesmen. There is, perhaps, a tendency to make rather pretentious claims about the consequent "widening of interests", and "purposeful" activity, and zest for local affairs which these clubs are supposed to engender. Is it really true that "even working hours may take on a changed interest" because of such activities as youth groups? Nevertheless, youth clubs can be a valuable exercise in democracy, and they can prepare young miners to take part in the ever widening range of activities which they will encounter in their adult lives - joint consultative committee meetings, management committees, sports, first aid work, and colliery welfare generally.

Furthermore/

2. Ibid.
Furthermore they give young miners a sense of well-being and confidence, and can help to create a climate of goodwill in the industry very different from the resentment and bitterness of the past.

After nationalisation the National Coal Board became responsible for housing. This responsibility was exercised by the Board directly, unlike other welfare amenities which were dealt with through the Welfare Joint Council. Most miners' houses which had been owned by the colliery companies passed to the National Coal Board under the options procedure. There were a number of miners' houses, however, which were not directly owned by colliery companies or by subsidiary companies, and these did not pass to the National Coal Board under the terms of the Coal Industry Nationalisation Act. These houses were owned by Housing Associations which had been set up by colliery companies to obtain the benefit of certain public loans and subsidies available under the various acts passed after the first world war. One such association was the Industrial Housing Association, Limited, which had been formed by fourteen colliery companies to build miners' houses. By 1945 the undertaking owned 29 building estates, comprising 10,000 houses, together with other buildings and land. Before nationalisation an understanding had been reached between the Mining Association of Great Britain, representing the colliery companies, and the Ministry of Fuel and Power that in the spirit of the Coal Industry Nationalisation Act the property of housing associations of this kind would be acquired by the National Coal Board if satisfactory terms could be arranged. The colliery companies who supported the housing associations could reasonably claim that they should not continue to be associated with the work of managing the housing estates, seeing that the miners would no longer be their employees but would henceforth be the Board's. The National Coal Board accordingly opened negotiations with the Industrial Housing Association, Limited, and other housing associations to acquire the freehold interests of the property at a total cost of £2,500,000.

In Scotland, the Scottish Special Housing Association (a government body set up to build houses to special requirements) now act as agents and builders for the National Coal Board. There is close liaison between this body and the Welfare Department of the Scottish Division. Mr. Herd, the Scottish Welfare Officer, has a "Welfare Architect" on his staff, a post which exists in few other Divisions. This means that in Scotland the National Coal Board has exercised close control over all details of housebuilding in the industry, and has made many improvements in the types of houses constructed for miners. The National
National Coal Board also has made arrangements with certain local authorities for 50% of new authority houses to be let to miners.

Owing to the housing shortage the National Coal Board had to make use of hostels, and these accommodation facilities were subsidised. In 1948, for instance, some 25,700 mineworkers were living in hostels at a cost to the Board of £900,000. The hostels were managed on the Board's behalf by the National Service Hostels Corporation. During 1949 the National Coal Board raised their charges from 25/- a week to 30/-, and later to 35/-. Although there were protests from the men, the increases by no means covered the full cost of running these hostels.

The attitude of management to Welfare in the coal industry has progressed considerably since the Samuel Commission in its examination of the modest facilities in operation at that time,¹ was informed by a colliery owner that "the welfare levy is inequitable and unfair."

To-day, surveying the whole field of welfare amenities, it will be recognised that the National Coal Board is on good ground when, in disputes with the National Union of Mineworkers, it draws attention to all it has done on behalf of its employees. If anything were required to demonstrate the sincerity of the National Coal Board in seeking the goodwill of the miners its welfare activities would surely be sufficient. It is true that the foundations of miners' welfare were laid long before the National Coal Board came into existence, but the national application - and the extension - of these amenities was facilitated by the 1946 Act.

¹ Royal Commission on the Coal Industry, 1925. Minutes of Evidence. Pages 537 - 545.
CHAPTER VII.

The Workers' Security

Sick Benefits & Medical Services

The hazards of coal mining—accidents, industrial diseases, and the consequent shadow of insecurity which hung over the miner's family throughout his working life—have placed miners in the vanguard of workers' demands for social security. Although many of these demands have been common to the trade union movement as a whole, the particular circumstances of coal mining deserve special consideration.

In the early nineteenth century the miners suffered considerably from sickness and accidents arising from their work and environment. At this date there was little distinction between general sickness and industrial disease, nor was particular attention paid to accidents, beyond the immediate treatment supplied by the colliery doctor.

The evidence given by Lothian doctors to the 1842 Commission provides a terrible picture of conditions at this time. Dr. S. Scott Alison, M.D., related his experience of seven years' practice in a colliery district. He found that the physical condition of the "collier population"—including women and children—was much inferior to that of other classes of the population which had come under his observation. His evidence covered the physical condition of mining people from birth to old age. At birth, the infants of miners, as might be expected, were not much inferior in physical condition to those of other classes, but before they had lived many weeks a "remarkable inferiority" became observable, especially to the children of farm-labourers and of "other individuals in comfortable and respectable circumstances." He found the miners' children "thin, skinny and wasted" and noted their "contracted features and sickly dirty-white or faint yellowish aspect." Among the causes of deterioration of health were "the unwholesome milk, the product of a mother the victim of disease of intemperate habits; the irregular and insufficient supply of milk in consequence of the mother who is engaged in the colliery; the indiscriminate and premature use of coarse and irritating food which frequently induces relaxation of the bowels, and the manifold ailments which collier people group under the title "bowel-hive"; the too long continued exclusive use of the mother's milk which not infrequently forms the chief sustenance of the infant during the first eighteen months or two years of its existence—a course too frequently pursued in order to save the pockets and exertions of the parents; a filthy condition of the person ... many of the infants in a colliery community are the subject of morbid habit of body, which they have derived from their parents/
parents, and of deformity."

Dr. Scott Alison's observations left no doubt that from the age of infancy up to the seventh or eighth year there was considerable sickness and a general imperfection of physical development among miners' children. At the age of seven or eight children began employment in the mines. "The children thus employed who came under my observation were employed for many hours together, perhaps for 8 to 10 or 12, without coming to the surface ... they were in the habit of working not only during the day but during the night also. I have seldom walked or ridden through the village at any hour during the night, summer or winter, without seeing little boys and girls going to and from the collieries, with their oil lamps in their hands or stuck in their caps, lighting them on their weary way."

The physical condition of boys and girls engaged in the collieries, Dr. Scott Alison discovered, was greatly inferior to that of children of the same years employed in farming or any other trade. They were on the whole "prejudicially affected to a material extent in their growth and development." Many were short for their years, and a considerable number became crooked and were the subjects of spinal curvature. "Wounds are very commonly suffered by these children ... I have attended young boys and girls on innumerable occasions for contusions and lacerations of their limbs. Fingers and toes have been severed by violence, or so severely lacerated and injured as to require immediate amputation. Their eyesight is frequently injured at this age by the accidental intrusion of coal dust or other materials; inflammation is induced and the loss of one eye has been a not infrequent result. Cough and difficulty of breathing is not uncommon among the boys and girls; and hypertrophy, or enlargement of the heart, has been frequently observed by me among the former, ere they arrive at manhood."

About the age of 20, the doctor reported, few colliers were in perfect health, almost all being more or less affected with difficulty in breathing, and with coughing and expectoration.

Between the 20th and 30th year many miners declined in bodily vigour and became more and more "spare". This period was fruitful in acute disease, such as fever, inflammation of the lungs, and pleura, rheumatic fever and many other ailments which were the product of over-exertion, exposure to cold and wet, insufficient clothing, interperance and foul air.

"After 30 years it is rare to find a perfectly health collier ... so very weak are some before they reach their fortieth year that they are unable to work/"
work more than two or three days in the week. Few are seen above 60 years of age, and a collier at 70 has seldom come to my notice."

Diseases of the spinal column were very common at all ages among individuals employed in collieries. Few middle aged or old miners were to be seen without curvature of the spine more or less extensive; the result of the unnatural position in which their bodies were retained for hours when at work. This affection was indicated by "general crookedness of trunk; by stooping and in general by one shoulder being higher than the other." Although the health of the miner did not necessarily suffer from mere curvature of the spine, Dr. Scott Alison had found that curvature was most complete in those with delicate health.

"Injuries from external violence", the doctor stated, "were very common among the persons employed in the collieries with which I was connected, constantly incapacitating persons for employment, leading to death and to permanent maiming... So frequent were accidents of a serious nature that I was never above a few miles from home without feeling impatient to return to my post, fearing that emergencies would be occurring... The direct influence of the occupation of colliers in inducing disease, in maiming and disabling, and further diminishing the duration of life is very great, and I believe far beyond what is supposed by the public in general; nor is the indirect influence of the employment of these people, upon their health and lives, less startling." Dr. Scott Alison was referring to such indirect influences as the absence of the women of the family from their domestic duties when they were toiling by the side of the men in the pit; bad housing conditions; and habits and customs of mining communities. He concluded his evidence - "When I regard the combined operation of the direct and indirect influences of the occupation of the collier upon the goodly human fabric, in the deterioration of physical conditions, in the depravity and heinousness of its moral nature, in the induction of disease and suffering and misery, and in the destruction of human life, I feel appalled with the contemplation, and question much whether the working of coal produces more happiness than misery."

Upon what a later age was to designate "industrial disease" for compensation purposes Dr. Scott Alison received strong support from another local doctor, Dr. William Thomson, M.D. of 80 George Street, Edinburgh. Dr. Thomson, in a letter to Commissioner R.H. Franks, dated 21st August, 1841, reproduced some of the evidence which he had formerly presented to the Medico-Chirurgical Society of London. He had ascertained that miners occasionally died of an affection/
affection of the lungs, accompanied with the expectoration of a large quantity of matter of a deep black colour. This kind of expectoration continued long after the miners had abandoned their subterranean employment (whether from illness or desire), and the lungs of such persons were found on examination after death to be most deeply impregnated with black matter.

In the course of his inquiry, Dr. Thomson had ascertained that this black deposition might occur to a very considerable extent in the lungs of workers in coal-mines, without being accompanied with any black expectoration or with any phenomena of active disease, and might come to light only after death had been occasioned by causes of a different nature, such as by external injuries. A third pathological fact also established by Dr. Thomson was that workers in coal mines were extremely liable to suffer from irregular action, and ultimately organic diseases, of the heart.

Dr. Thomson's conclusions were that the black deposits in the expectoration of miners was due to imperfect ventilation. "With regard to the exciting causes of those affections of the heart to which coal miners are very subject, equally little doubt can be entertained that a large proportion, if not the whole of them, have their origin in the impediment to the proper exercise of the respiratory function that is occasioned by the noxious character of the air they breathe."

Dr. Thomson went on to give an example known to him where men had been exposed to noxious agencies. "In carrying a mine across the coal strata in an estate in Midlothian, the finishing of which required a number of years, six or eight miners employed in it died; several were obliged to leave it, and only one of those who commenced it was able to work it throughout, and lived to see it completed."

The evidence of the doctors upon the health of the Lothian miners was, however, by no means unanimous. Dr. Morrison of Dalkeith, for instance, found that the individuals (adult and infant) under his care at the Duke of Buccleuch's collieries had shown no diseases of a distinct character. There was only one complaint peculiar to the adult population, confined exclusively to men, characterised by coughing, difficulty of breathing and a sense of constriction of the chest. This view was supported by Mr. John Symington, Surgeon. Referring to the disease of the adult population employed in the collieries of Arniston/{}


2. Ibid. Page 425.
Arniston and Newbattle, Mr. Symington found "no peculiarity existing among them more than among the surrounding population, except in the male, and that consisting in the affection of the lungs peculiar to colliers, commonly known by the name of colliers' consumption." In reasons for its incidence among males rather than females was that men were breathing the impure air at the coal face, while the females were engaged in taking the coal to the shaft bottom where there was always a current of purer air. Females employed in the Arniston pit did not escape hazard completely, however: "Females in the works generally suffer more in parturition than those of other labouring classes."

In view of the fact that women toiled in the pit, carrying heavy loads or pulling tubs to which they were chained, until an advanced state of pregnancy, it was hardly surprising that childbirth involved greater dangers to them than to other classes in the community. Fortunately, the abolition of female employment in the mines had put an end to this particular hazard by the middle of the nineteenth century, and from then onwards this survey is concerned chiefly with the health of adult male miners.

Self-help was the main feature of early schemes in operation among Lothian miners. By 1842 benefit and friendly societies were "pretty general in the collier communities" (evidence of Dr. Scott Alison) and to a very great extent relieved the distress of the "provident and careful colliers." It must be remembered that at this time there was no legal provision in Scotland for destitution resulting from interruption or loss of employment.

These early friendly societies had three main functions. They provided a "sickness fund" for affording weekly payments in money during sickness or disability; a "superannuated fund" for affording weekly payments to members who were permanently disabled either by accidents or old age, and also to widows of miners; and a "Life Assurance Fund" for affording a sum as funeral money, payable at the deaths of members, members' wives or widows, and "male children dying under 13 years of age, and female children being unmarried."

It will be observed that these societies accepted responsibility, along with sickness, for accidents which later fell within the scope of workmen's compensations; and that their activities extended even to the provision of pensions.

Benefits at this time were as follows: for sickness 5/- was paid for the first 13 weeks, 3/- for the second 13 weeks, and 2/6 for the third 13 weeks. Superannuated/

2. Ibid. Page 402.
3. Ibid. Page 402.
Superannuated members received 1/6d per week. The regulations usually withheld assistance in cases of accidents accompanied by intoxication, or of intemperance at any time of receiving assistance. Commenting upon these regulations to the Commission, Dr. Scott Alison observed that "the habit of intemperance of the class from which the members of such societies are derived is curiously noticed in the regulations of most of these societies."  

The friendly societies in Midlothian were not regarded with complete favour by employers. According to Dr. Scott Alison "it has happened indeed that the accumulated funds of friendly societies have been perverted to the mischievous purposes of the unions in some places; and Mr. James Wright, manager of the Duke of Buccleuch's colliery at Dalkeith informed me that in the year 1837 the colliers of the Lothians were contributing no less than 1/6d per week to a society of this kind, and the funds thereby collected were afterwards applied to the purposes of the Dalkeith Union, of which almost all the colliers in the Lothians were members; and so considerable was the sum thus accumulated that it enabled the colliers at Newbattle and other places, to the numbers of several hundreds at each colliery, to remain off work for a period of 3 or 4 months."  

It was the practice of some collieries to employ one or two medical officers to attend the men, and the employers would usually defray extra charges arising from accidents. The men paid a small weekly sum for the services of the doctor; the amount was usually twopence per week. In spite of these provisions, in 1842 Commissioner R.H. Franks was appalled at the general apathy and indifference which he found towards accidents in East of Scotland mines.

Some private charity was dispensed by the proprietors of collieries during idleness; a sick miner usually received his weekly supply of coal (worth about ninepence) upon the handing in to his manager of a doctor's certificate.

The long and honourable history of such Friendly Societies and trade unions as those of the miners was recognised in the 1911 Act. It is not proposed to discuss the national health legislation of this period in detail, but/
but certain aspects of particular concern to the coal mining industry should be mentioned.

The decision to use and extend the existing machinery of friendly societies and trade unions meant that the segregation of occupations continued. This was particularly unfavourable to an industry like coal mining where the incidence of accidents and sickness was high. Although the statutory benefits were common to all workers there was a wide range of additional benefits. Thus although the miners benefited absolutely, in the sense that the State and the employers were now adding contributions of 2d, and 3d, a week respectively to their own contributions of 4d, the additional benefits provided by the miners' own approved society funds fell far below those provided by wealthier and less hazardous trade groupings.

In a survey conducted in the Lothians and Fife in 1942\(^1\), it was revealed that most miners and their agents regarded the Miners' Society, formed at the beginning of National Health Insurance, as "a most regrettable mistake" and there was strong discontent that the Society in spite of its promises, had never been able to pay more than minimum rates. Two advantages existed, however, in continuing to remain a member of this society. It was credited with paying more promptly than its rivals, and with admitting "bad lives" more readily to membership. To the sympathetic miner this latter reason was the stronger.

Another factor must be taken into account. This was the tradition solidarity and loyalty of the miners to their own organisations, although it was sorely strained when put to the test in the case of sick benefits. As one Midlothian miner stated\(^2\), "Difference in payment of benefits is widely known and, but for sentimental reasons and apathy on the part of the original members of the Miners' Approved Society, I cannot understand why then have not changed. I switched over to the Free Gardiners when I got tired of hearing their promises, the difference at that time being about 3/- in the week sickness benefit, 10/- maternity benefit, with additional optical and dental benefits. I incurred the sarcasm of my Union official (a senior colleague in the Independent Labour Party). I was accused of disloyalty to my trade union. I told him that I had my own home to be loyal to in the first place and that the Miners' Federation ought to have left the field of activity to the Friendly Societies or one common administration."

In one sense, however, the Friendly and Trade Union Societies in the Lothians came close to fulfilling the hopes of Lloyd George. This was in the attainment/

2. Quoted by Dr. M.T. Rankin.
attainment of democratic control. Whereas these societies held district meetings at convenient centres for their members, with powers to recommend to their annual general meetings, the larger Collecting Societies merely advertised their Annual Meeting in the press to be held in the particular town in which their Head Office was situated. On the other hand the larger Collecting Societies exercised a greater vigilance over the activities of sick members, a policy which was strongly disliked by the trade unions.1 "Some of the larger commercial societies have a form of private detective agency to visit persons when sick, even although the member is still under medical care, which is a practice that is detested by all insured persons. This practice is a decided reflection on the character of the insured person as also of the doctor."

Although, by the outbreak of the Second War, the miner was enjoying - in common with other workers - benefits denied to his grandfather there was still widespread discontent with absolute amount of assistance. As Dr. M.T. Rankin was informed in 1942: "Despite the 3/- granted this year, 18/- weekly is not sufficient to keep the patient, seeing that rent, light, heat and other expenses have to be met, quite apart from the other necessaries of life. If married, the position speaks for itself; any little savings have to be used or help given by friends, and in some cases Public Assistance is sought." The waiting period was regarded as an unnecessary hardship. "It means that the insured person has to keep the home for two weeks on the sum of £1:7:-."

The Secretary of the Midlothian and East Lothian Miners stated: "The three waiting days have always been the subject of resolutions as a distinct hardship and ought to be abolished." The evidence of a Midlothian miner was given as follows: "The general opinion is that the sickness benefit is grossly inadequate. Many respectable miners are much worried by the thought of being ill. I myself recollect an occasion during depressed trade and low wages when I lost two weeks' work with "flu". My sickness benefit was computed as follows - 14 days less 3 waiting days plus 2 Sundays, leaving 9 payable. My society paid 2/11d per day - 26/3d. My rent for a tied house amounted alone to 21/2d. (It was not, however, paid until I resumed work; no pressure by the collieries is applied until three months or so). I had thus 5/1d to keep seven of us for two weeks. The result is a good deal of uneasiness and worry during the illness, and many fellows started work when they really ought to have had a convalescent period. Other miners simply put themselves on the parish...The benefits were and still are/
are supplemented by some of the Friendly Societies. In some colliery districts a Works Friendly Society is still existing, but not flourishing. Drawings at the colliery which are sometimes taken in cases of lengthy illness are also on the wane. The Public Assistance Department is developing into the main-stay. The old idea of revulsion to the parish dole tends to disappear."

The need of the miners for surgical appliances or aids could be satisfied usually only through the Public Assistance Department, and even this source of supply was neglected through ignorance. "Trusses and spread bandages are bought by the people themselves. In the past miners collected for an invalid chair for any member of the community who required one."

It was felt that additional benefits most urgently required were the "optical" and "dental", and that they should be made general. The conditions under which the miner worked made the former particularly important. A Midlothian miner thought that the value of optical and dental treatment required stressing, as there was a lack of knowledge in such matters. "After 30 years of age, many miners seem well content to go about toothless for the rest of their days."

The 1942 survey thus revealed a widespread feeling among Lothian miners that sickness benefits were inadequate. Their criticisms of existing facilities were by no means ill-informed; both the trade union officials and the miners themselves were acquainted, through experience over many years with their own society, with the principles of insurance and the many practical difficulties involved. They preferred to see existing benefits made more adequate and general before any new benefits were introduced. The benefits requiring to be made more adequate were (1) sickness benefit on the basis of family needs and (2) maternity benefit made more adequate from the point of view of the mother and child. To achieve this, it was felt that an all-round scheme should be introduced (one union official suggested an upper limit of £750 per year), thereby avoiding the position whereby the safer elements escaped or contracted out, leaving the riskier elements like miners to insure each other.

Hitherto far too much had been pushed on to the Public Assistance Committee as a consequence of this policy. But this did not relieve the burden upon the miners as a class. From the point of view of the mining community, it was merely another method of keeping their risks on their own shoulders instead of spreading them more evenly throughout the nation.
National Health Insurance as it operated at this time thus attempted to deal with two separate but related problems - the healing of the sick and their maintenance during illness. It worked through the somewhat clumsy dual mechanisms of the Approved Societies and the Insurance Committees, and it provided insured workers with sums that were not sufficient to maintain them during sickness. This sickness benefit, as we have seen, took no account of the dependents of the insured sick person, and when sickness had lasted six months it was automatically reduced to disablement benefit (10/6d per week). This was insufficient to cover the cost of one man's food. These problems were not, of course, confined to coal miners, but the hazards to which these workers were exposed and the conditions in which they worked lent additional urgency to the matter as far as mining communities were concerned.

With regard to the related problem of the healing of the sick, medical service stopped short at specialist treatment. The scheme suffered because it was geared too closely to private practice. This observation by no means reflects upon the integrity of the general practitioners in mining districts. The views expressed in the 1942 survey by Midlothian miners may best be described as unsolicited testimonials expressive of sincere gratitude and satisfaction regarding doctors' services. The panel doctor was just as much a freely selected family doctor as the private doctor, and was just as easily changed if the miner were not satisfied with his services. Doctors in Midlothian took the changes quite philosophically, as in the main they cancelled out. One Lothian miners' representative gave instances of doctors' careful and considerate attention towards their panel, such as going out personally at night to give the patient medicine, so that the man's wife, who was nursing him, might have unbroken sleep. There were criticisms, however, by some miners that the panels were too large.

The main deficiency in the provision of medical service was that doctors worked in professional isolation; the insurance system made no provision for medical team-work, co-operation or research. There were no general arrangements for the co-ordination of municipal health services with the work of insurance doctors, nor was there provision for the rehabilitation of those who had been sick or injured. This was a particularly serious defect in the scheme as far as miners were concerned, as we shall see when we come to consider workman's compensation. It was in the interest of the Approved Societies to get their members back to work as quickly as possible, but there was no organised attempt to carry through the whole treatment process constructively until the worker was contentedly reinstalled in a job that he was capable of performing. In this sense/
sense, medical care was badly neglected.

Over the period between the wars, while the incidence of serious accidents and of some kinds of disease among the mining population was higher than the average for the working population as a whole, the medical services, including such facilities as hospitals and rehabilitation centres, available for mining communities were undoubtedly inadequate. Two factors, however, made for improvements during this period. One was an increase in statutory requirements; the institution of a Mines Medical Officer to investigate the occupational diseases of the industry and to inspect the fulfilment by the colliery companies of their legal obligation to supply a certain minimum standard of first-aid treatment. The other was the work performed by the Miners' Welfare Committee in providing convalescent homes throughout various coal fields.

Wartime conditions provided the impetus for improvement, although consideration was given to the miners' health from the viewpoint of the wastage problem rather than from lofty humanitarian motives. The White Paper of 1942 declared:

"Although there is nothing that can be done to reduce the numbers leaving the industry through death, disablement and normal retirement, it should be possible to reduce the numbers of those leaving with medical certificates on account of sickness of a not very serious character. In many cases, miners suffering through illness from some loss of physical fitness could be retained in the industry if further arrangements were made for medical treatment. The Government therefore proposes to establish a Medical Consultative Service for the mines ... All applications for release on medical grounds will be dealt with through the Service and arrangements will be made in suitable cases for men to receive appropriate treatment designed to enable them to continue their employment in the mines."

The new Mines Medical Service, in co-operation with the Miners Welfare Commission, thus began to develop the first adequate rehabilitation service which the miners had possessed. It is true that before the war the Miners' Welfare Committee had agreed to make grants to fracture or orthopaedic departments in hospitals, where fracture cases among miners could receive surgical treatment. But although surgical attention and accident rehabilitation treatment as an in-patient at a hospital may be adequate where the injury is not severe, more difficult cases required treatment as an in-patient at a special centre. It was therefore decided in 1942 that, in view of the inadequacy of existing hospital services for the rehabilitation needs of miners, special accident rehabilitation centres should be provided. The Minister of Fuel and Power/  

Power invited the Miners Welfare Commission to build these centres, taking advantage of the staff of architects and other specialists who, before the war, had been employed on the construction of pithead baths. The Commission assumed responsibility for the capital expenses and the running costs of the rehabilitation centres, of which seven were opened or came into the hands of the Commission during the war, while other rehabilitation work was subsidised by them at selected hospitals. The centres were intended to take patients (employed in the mining industry) for treatment from the specialised fracture hospitals.

Although comparatively few miners passed through these centres (in 1945, for example, the number was 1,261) their mere existence served to remove anxiety from the minds of the miners. And although the impetus behind the medical service had been the prevention of wastage and the maintenance of production, once in operation it became the concern of doctors at rehabilitation centres to treat the men in their care as patients rather than potential production units. Treatment was given, for instance, to men who would never return to the coal-mining industry.

After 1942 new schemes for improved first treatment of sickness and injury at the pits were developed by the Mines Medical Service. The schemes were operated through Mines Medical Officers, stationed in the regions. The recommendation of the White Paper of 1942 that "all applications for release on medical grounds will be dealt with through the Service" was duly implemented. The work was done largely through liaison with general practitioners; more precise and uniform standards were maintained in the release of men from the industry upon medical certificates. The Mines Medical Service also co-operated with the Ministry of Labour and National Service in giving medical examinations to all persons under eighteen years of age entering the coal-mining industry.

Thus, under wartime conditions, the various medical services available to miners were better than ever before in the history of the industry.

There has been some controversy as to whether, apart from accidents and the industrial diseases special to their calling, miners were more liable to sickness than other groups of workers. The writer is not qualified to assess the medical evidence upon this matter, but it may be useful to recapitulate past discussion upon the healthiness of the occupation.

The

1. "Miners' Welfare in War-time" (Ashley Court, Ashstead, Surrey); 1947. Page 53.
The Samuel Commission \textsuperscript{1} "saw no reason to think" that the occupation was physically injurious, and cited statistical evidence to show that miners were on the whole a healthy class. It was recognised, however, that this might be partly due to the fact that only men of physique above average entered the occupation or continued in it, and there was no statistical evidence to cover this point.

But while the Samuel Commission was gratified to find that the General Mortality Tables showed for coal miners, in most age groups, lower mortality rates in 1921-1923 than in 1910-1912, it was disconcerted to note that this improvement was less marked than the improvement that had taken place in the corresponding rates for the general male population. The result was that, while in 1910-1912 coal miners held the advantage, the position by the time of the Samuel Report had been reversed (except between the ages of 35 and 55) and coal miners showed slightly higher mortality rates than the occupied and retired male population of the country generally. \textsuperscript{2}

The Samuel Commission was unable to advance reasons, in spite of its many and varied expert witnesses, to account for this change. It found that accidents did not seem to have contributed to it, nor could it be assigned to any other particular causes of death; all causes except accident, in the Registrar-General's classification, appeared to have contributed uniformly. One possible hypothesis was that this relatively increased mortality among coal miners was attributable to the large number of men who had entered the industry during and after the war, and who were, perhaps, less robust than the average coal miner before the war.

More recent evidence, however, upon the health of miners in the inter-war period indicates that miners showed more sickness than many other groups of workers. \textsuperscript{3}

Post-Nationalisation

Legislation introducing a new health service ran almost parallel with the legislation transferring the coal industry from private ownership to public ownership. 1946 saw the passing of the National Insurance Act and the National Health Service Act. On 21st May 1947 the National Health Service (Scotland) Act became law.

A/

2. Cmd. 2600, Appendix No. 32; also Memorandum of Evidence (submitted by Dr. J.S. Haldane) Para. 12.
A new sickness benefit rate of 26/- weekly (2/- more than that proposed by the Beveridge Committee) was introduced. Henceforth insurance against sickness was merged in a general insurance scheme which covered unemployment, old age and widowhood. The rates of contributions for employed men were fixed at 4/7d (employee), 3/10d (employer) and 2/1 (State) with the proviso that the rates were to be increased by 4d a week (2d each for employees and employers) after five years.

The essence of the plan was that free medical service was provided for everyone. The scheme made possible a much closer link between a national medical service and a national rehabilitation service on the lines suggested by the Tomlinson Report.1.

Apart from the provisions of the new national health service the National Coal Board was under statutory obligation to secure "the safety, health and welfare of persons in their employment"2. The National Coal Board accordingly set up a comprehensive health service throughout the industry. As a start a Chief Medical Officer was appointed at the Board's National Headquarters, and medical officers were appointed by divisional boards. Doctors were appointed to large collieries and to groups of collieries in order to organise health services for the industry locally. Responsibility for medical centres attached to pithead baths was transferred to the National Coal Board from the Ministry of Fuel and Power on 1st January 1947. The National Coal Board also announced that its policy was to employ State Registered Nurses at all large collieries.

The National Coal Board continued to develop their medical services in the coal fields until June 1949. In that month the Prime Minister announced that the Government had set up a Committee to examine the industrial medical services and their relationship with the National Health Service. He appealed to industry to defer any major development of medical services until the Committee had reported. A member of the Board was appointed to serve on the Committee. After June no new development was started but work in progress was continued, and 22 more colliery medical centres were built during 1949, bringing the total number to 33.

The Dale Committee's report was published in 1951.3. It supported the provision/

provision of medical services by employers and the National Coal Board resumed the building of new colliery medical centres and recruitment of staff. By the end of 1951 the National Coal Board was employing 46 full-time doctors and 124 State Registered Nurses (compared with 7 and 37 respectively in 1947 when they took over the scheme).

It must be remembered, however, that the traditional panel system still formed the backbone of the health service for miners as well as for other citizens. The miner had the additional advantage, however, of a highly efficient and comprehensive industrial health service.

(2) Workmen's Compensation

It can be safely assumed that adequate compensation for injury or death was unknown in the Midlothian coal fields in the early nineteenth century. The evidence of Commissioner R.H. Franks leaves no doubts in the matter; the story of callousness and inhumanity which he unfolds cannot fail to move us with horror and dismay at the fate which befell the afflicted miner.

At this time the injured workman could only obtain compensation by bringing and winning — a common law action against his employers. The onus was on him to prove personal negligence upon the part of the employer. If the accident were due to the negligence of a fellow-servant he would find his claim barred by the doctrine of "common employment". The passing of the various Mines Acts, however, limited the scope of common employment. These acts required that certain precautions should be taken and certain conditions observed, and the employer became absolutely responsible for seeing that they were implemented. If an accident resulted from a breach of any of these statutory duties, the injured workman could bring an action for negligence against the employer, even though the latter may have delegated the duty of carrying out the statutory requirements to a fellow-servant of the plaintiff. There were various other defences, however, open to the employer. One was that known as "volenti non fit injuria", which meant that the injured workman was said to have known the risks of his employment, and to have accepted them. Statutory duties laid down by the Mines Acts, however, precluded coal owners from invoking this defence, but they were entitled to allege "contributory negligence". If the evidence showed that the/

the worker was partially responsible for the accident that caused his injury, in so far that without his negligence the accident would not have happened, the injured man's action was ineffective. It will be recognised that, faced with obstacles such as this, the majority of industrial accidents went entirely uncompensated.

The passing of the Employer's Liability Act in 1880 did not materially affect the position as far as the coal miner was concerned. Although the defence of common employment was excluded in certain cases it was still open to the employer to fall back upon "volenti non fit injuria" and contributory negligence.

Of considerably greater importance was the 1897 Act which introduced an entirely new principle into the scheme of compensation for industrial accidents. Henceforth negligence by the employer was no longer a necessary condition for the award of damages. The workman was given an absolute right to compensation for "personal injury by accident arising out of and in the course of his employment", and even the workman's own negligence did not render him ineligible for compensation. The definition "arising out of and in the course of his employment" could hardly have been wider, and it has been preserved in all subsequent workman's compensation legislation. It is a clause which nevertheless has given rise to a vast volume of litigation.

The 1897 Act applied only to workmen employed in or about railways, in factories, mines, engineering work, quarries or on buildings over thirty feet high. Another Act in 1906 extended the provisions to all persons working under contract of service or apprenticeship, except non-manual workers earning more than £250 (later increased to £420) per annum. Compensation was related to average earnings and took no account of family responsibilities. In 1923, following a Report of the Homan Gregory Committee, another Act was passed, and the legislation was consolidated in 1925. An Act in 1940 raised the weekly payments.

The provision that compensation could be claimed by a workman for an industrial disease in the same way as for an accident was particularly significant in the coal mining industry. Although the 1925 Act provided a list of these diseases, together with a list of the occupations which might cause them:

1. Fenton v Thorley - 1903. A.C. 765.
   Gilbert v Coles - 1931. 24B.481.
them, the schedule was not exhaustive. The Secretary of State was given power to make orders extending the provision for compensation to other diseases and other processes. In coal mining, serious disease is nystagmus, a troublesome malady of the eyes which might incapacitate for work for long periods. The symptoms are oscillations of the eyeballs, with giddiness, accompanied by severe headaches, and not infrequently by forms of neurasthenia which makes it impossible for men to continue their employment underground. Dermatitis and infections of the knee, elbow and hand ("the beats") are other occupational diseases found among mineworkers.

With regard to lung diseases the miners' union found it more difficult to establish a claim. Until 1943 many miners suffering from lung diseases due to their employment were being denied compensation, because they could not prove that they had been working in silica rock (then believed to be the only cause of these diseases), or because their disease was not sufficiently advances to be recognised as silicosis. The investigations made by the Medical Research Council in South Wales, by proving that coal and other dust may cause lung disease and by establishing the existence of another form of the disease (pneumoconiosis) secured compensation for miners hitherto denied it, and laid the basis for future claims. A special compensation scheme for pneumoconiosis was introduced in June, 1943.

One feature of workmen's compensation was that there was no State-administering authority, nor indeed much state control. Although there was an obligation on employers to pay compensation to workmen injured at work, the way in which they met their obligations was their own affair. There was no compulsory insurance, and it was not until 1934 that the mining industry was singled out for special measures. By the Workmen's Compensation (Coal Mines) Act of 1934 all employers in this industry were compelled to insure against their liability for accidents to their workers. One advantage of this act was that the rights of injured workmen were secured in the event of the liquidation of colliery companies.

The relations between the Miners Federation of Great Britain and the insurance companies, however, were frequently bitter. The miners alleged that insurance companies and indemnity societies had little knowledge of the individual injured workman or the conditions existing in the various collieries. Their only concern, the miners alleged, was to escape liability wherever possible. The miners particularly disliked these indemnity societies who employed full-time medical men for the purpose of examining disabled miners.
The Miners Federation of Great Britain resented the enormous sums of money which it had to spend every year to protect injured workmen against the activities of the insurance companies.

Another criticism was the delay in paying compensation which, according to the evidence of a Lothian trade union secretary in 1942, was "one of the worst evils in Workmen's Compensation which is mainly caused through the insurance companies who advise employers ... the employer being the party legally responsible should be forced to make immediate payment. Any trouble between them and the insurance companies is their affair and should not be placed on the shoulders of the injured person". A Midlothian miner stated: "Much of the delay is very stupid and unnecessary." He went on to explain an experience of his own when he had to wait five weeks before compensation was paid because the certifying surgeon was on holiday and the locum tenens who signed his certificate was not recognised by the Scottish Coal Mining District Association as having the power to do so. Another example he gave was when the certifying surgeon and the Scottish Coal Mining District Association doctor differed as to the precise description of an injured elbow although both agreed that the injury was caused in the course of work. "The fellow had to wait seven weeks before he got a penny and was humbugged with visits to Edinburgh for medical examination by referees and nobody could tell him when he would receive his dues. He had a wife and five small children and had to be supported by the Public Assistance Committee." Although these examples are not tragic in consequences, they illustrate the bitterness of the miners towards the indifference and inhumanity which they felt was being demonstrated.

Midlothian trade union officials were particularly on their guard against the "lump sum" settlement. Insurance companies were wont, through their very able and enterprising agents, to suggest to an injured miner after he had been receiving weekly payments for a few weeks that a great deal of trouble would be saved to all parties if he were to agree to the payment of a lump sum in commutation. Miners who were unduly optimistic as to their chances of recovery, and those who had been living on a very small income, were often susceptible to these arguments, unless their union officials could act in time to dissuade them. A Midlothian miner stated: "There is a good deal of cajolery used and while it is true that some of our fellows succeed in outwitting the agents and doctors it is also true that many a highly suggestible simple fellow has been done too. Stories of the terms of offer, what was asked and what was argued over/
over in cases where partial or total disability was concerned has long been a
form of entertaining tales among miners during their piece-time break in the
pits. The stories are often colourful, exaggerated and far stretched tales of
conquest, and I have noted several times how the teller re-telling his ex-
perience added a little more glory from time to time. I have not, however, met
many miners who could weigh up the physiological or mental probabilities when
urged to come to a settlement in partial disablement. Their future health and
welfare is often subordinated to the immediate financial settlement or bribe.
The advent of the Hire Purchase and Installment system aggravates the situation
if anything, and is worth mentioning as a factor of worry and anxiety during
illness or accident."

A trade union secretary stated: "It is a hard and fast rule for Insurance
Companies to urge acceptance of a lump sum settlement rather than to continue
weekly payments for an indefinite period ... The person injured is mainly under
duress when the lump sum is offered through inability to meet ordinary
expenditure and faced with the thought as to his future employment with the
firm with whom he had been engaged. In the main, the person with a lump sum
offer has many debts to pay off caused through the meagre compensation allowance
and if there is a surplus after he has cleared off debts the member is advised
to lay it aside as he never knows when a recurrence of his disability will
arise through the initial accident."

The maximum rate of compensation prevailing by 1943 for cases of total
disability due to accidental or industrial disease was as follows:

<table>
<thead>
<tr>
<th>Incapacity</th>
<th>First 13 Weeks</th>
<th>After 13 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Man</td>
<td>35 Shillings</td>
<td>40 Shillings</td>
</tr>
<tr>
<td>Married Man</td>
<td>40 &quot;</td>
<td>50 &quot;</td>
</tr>
<tr>
<td>Married Man with one child</td>
<td>45 &quot;</td>
<td>55 &quot;</td>
</tr>
<tr>
<td>Married Man with two children</td>
<td>50 &quot;</td>
<td>60 &quot;</td>
</tr>
<tr>
<td>Married Man with three children</td>
<td>55 &quot;</td>
<td>65 &quot;</td>
</tr>
<tr>
<td>Death - Widow alone</td>
<td>£400 (minimum £300)</td>
<td></td>
</tr>
<tr>
<td>Widow and children</td>
<td>£2700</td>
<td></td>
</tr>
</tbody>
</table>

These rates were maximum rates, and were subject to an important qualifica-
tion. This was that they were not to exceed two-thirds of the pre-accident
wage, or where there were children, seven eighths. It will be noted that an
accident automatically, under this rule, involved financial loss to the injured
miner and his family. In any event, the rates usually meant that the majority
of injured men were receiving less than half the income they earned at work.
In cases where the worker was only partially incapacitated for work (a
condition/
condition very difficult to define) the rate of compensation was based on be-
-half the difference between his earnings before the accident and what he was
earning, or deemed to be able to earn in some suitable occupation after the
accident. If, for instance, his pre-accident rate of wages was £5 and his
earnings on light work were £4, his partial compensation would be 10/- (plus a
proportion of the supplementary allowances, bringing it up to 11/6d for a
single man). Many men, although partly recovered, were unable to get suitable
work at the collieries. The evidence of Midlothian trade union officials at
this time was categorical upon this point. "Injured workers have some diffi-
culty in maintaining their place in the industrial field as little sentiment
is in evidence these days and occupations of a light nature are few and far
between. Those with industrial disease though pronounced fit to resume work
have similar difficulty as many workers hesitate to work alongside persons who
have been afflicted with industrial disease and experience shows that most
employers are chary of engaging workers where the possibility exists of a re-
:urrence of the disease." This was the view of a local trade union secretary.

Particular difficulties faced the man who had been afflicted with nystag-
-mus. Although many men recovered from this disease, it was always liable to
recur when men resumed their ordinary employment, and employers were loth to
re-employ them because of the risk of having to compensate them later. Despite
the fact that many miners were thus barred from returning to their employment
in the mining industry, compensation was not paid in these cases although it
was known that they had been refused jobs because of their former affliction.

One Midlothian miner stated: "In most mines a declaration that you have not
suffered from miners' nystagmus is filled in on a form as a condition of employ-
-ment. I think it is very probable that when trade was poor the management
would be advised to select men whose record was clear as far as industrial
disease was concerned." A miner making a false declaration with regard to
previous industrial diseases forfeited his right to compensation if further
disability arose. A man denied employment due to a previous bout of nystagmus
might well find that the anxiety of unemployment intensified any latent nervous
symptoms.

The fact that men were fit for light employment allowed employers to base
partial compensation on a hypothetical wage as a colliery labourer, which they
might get if there were a job for them. The procedure was that, as soon as the
injured man had recovered enough to enable him to do some form of light work,
otice was given reducing compensation to the partial rate. In many of these
cases/
cases disputes arose as to the degree of disability, and there was probably a
protracted period of legal argument and continual re-examination of the worker.

The offer of "light work" was regarded by most Midlothian miners with sus-
picion and dislike. It was believed that the pressure to take on "light work" was usually put on by the insurance companies. One official stated: "The term light work is a misnomer and has never been clearly defined by the Law Courts. As long as workmen's compensation is controlled by private companies whose sole purpose is to circumscribe the amount to be paid to an injured person, so long will there be pressure brought to bear on the injured person to accept "light work" whether it is suitable or not or even cannot be found." A Midlothian miner drew attention to the fact "that there is no light work about a colliery except the manager's!"

The views of a Midlothian doctor, however, were not completely favourable to the miners' viewpoint. "Not unnaturally some injured workmen are very loth to go back to work on the ground that their compensation will be affected ... At present a doctor will certify a man as fit for light work. The man reports to the Colliery Office and the manager in all probability informs him that no light work is available for him. The man goes to the labour exchange and there he is sent to light work. If the man's back has been injured the light work is sure to involve bending and the man complains that he is unfit! If the man's leg has been injured the light work is sure to involve walking and the man will complain of strain! The employer then thinks that he is only available to lift scraps of paper from the ground with a pointed stick while another workman wheels him in an invalid chair! At present there is no doubt that some workmen who have been injured are far too slow in getting back to their work. They prefer to hold back in the hope of receiving a larger sum in settlement of their claim."2.

Post-Nationalisation
The workmen's compensation scheme described above was altered under the National Insurance (Industrial Injuries) Act of 1946. The assumption of the new National Coal Board of the employers' responsibilities towards injured workmen thus coincided with the introduction of new legislation covering these re-
s:ponsibilities.

The broad outline of the new act meant that compensation for industrial injury was changed from being an obligation on the employer and became an insur-
ance to which worker, employer and State all contributed. The formula still used/

1. Evidence to the Nuffield College Social Reconstruction Survey: Dr. M.T. Rankin Page 41.
2. Ibid. Page 44.
used as the basis of deciding claims was "accidents arising out, and in the course, of employment". On two points the new Act was more specific than previous legislation. It stated that an accident occurring in the course of the injured person's employment should, in the absence of evidence to the contrary, be deemed to arise out of it; also that where an accident occurred while the injured person was travelling in transport provided by the employer, the benefit may be payable even though there was no obligation to use such transport.

The benefits of the new act are not, as under previous workmen's compensation, related to loss of earnings. If a man cannot attend his work because of industrial accident or disease, he gets injury benefit for a period up to 26 weeks at the rate of 45/- a week for a single man. At the end of the period, whether or not he is fit to return to work, Disablement Benefit is paid in all cases of "permanent" or "substantial" disability. This takes the form of a pension ranging from 9/- to 45/- a week for a single man, depending on the degree of disablement. If men are disabled and need someone to look after them, a Constance Attendance Allowance may be granted up to 40/- a week. Finally, there is a special hardship allowance of up to 20/- a week, but the Disablement Benefit and the Special Hardship allowance together must not exceed 45/- a week. A man who is being paid Disablement Benefit may also draw Sickness Benefit under the National Health Scheme and this amounts to 26/- a week for an adult. In cases of death caused by accident or disease, Death Benefit is payable to dependents. There is, for example, a Widow's pension of 20/- or 30/- a week (depending on circumstances) with additions for children.

It will be seen that these new regulations represented a considerable advance upon previous conditions, even though the worker now himself contributed for the first time to industrial injury insurance. The new provisions met many of the criticisms raised, for instance, by the Midlothian miners during the war. But even these improvements were not the whole story. A special case for still further improvements was being advocated on behalf of workmen in the coal mining industry.

When the National Insurance (Industrial Injuries) Bill was before Parliament it was argued that additional benefit should be payable to mineworkers because of the special dangers of their work. The Government refused to agree that higher benefits could be provided by the Act itself, but they did agree that if any body of employees and employers believed that greater benefits were justified in their industry, there could be a Supplementary Scheme, so long as no part of the cost fell on public funds. A new provision was therefore inserted in/
in the Act by which the Minister of National Insurance was empowered to approve Supplementary Schemes of this kind and to assist in their administration; before such a scheme could come into force, a draft of the Minister's order approving the scheme was to be laid before Parliament and approved by a resolution of each house.

This provision was invoked by the National Union of Mineworkers, who asked the National Coal Board to join with them in submitting a supplementary scheme to the Minister because of the special dangers in mining of accidents and disease. Although safety in the mines was improving, 618 people were killed in 1947 and some 2,500 seriously injured, while nearly 4,000 men were certified as suffering from the industrial disease of pneumoconiosis. The Union's argument was a powerful one; if there were no case for a Supplementary Scheme for the mining industry, they argued, there could not be a case for a scheme in any industry and the intention of Parliament in making provision for such a scheme would be frustrated. The National Coal Board was cautious in its response, bearing in mind the heavy financial burden which a Supplementary Scheme would impose upon the coal industry. Although the Board's contributions under the new Act would be less than their payments under the old Workmen's Compensation Acts, any saving after July 1948 (when the Act came into force) could do little to reduce the heavy deficit with the industry carried forward from the previous year.

The strength of the National Union of Mineworkers' argument was not lost, however, upon the National Coal Board. It was acknowledged that in the past many miners had suffered injustice over industrial injuries, and there was a legacy of distrust and suspicion. Furthermore recruitment was affected; the dangers of mining and the financial anxieties to which they gave rise had tended to discourage some people from joining the industry. Another factor was that when the 1946 Act came into force, although some injured miners would get more than they would have got under the Workmen's Compensation Acts, others would get less. Finally, for reasons of justice and reasons of business - the need for a contented labour force and the need to attract good people into the industry - the National Coal Board decided that, if the Minister approved, there should be a Supplementary Scheme, and that it should start on 5th July 1948, the day the National Insurance (Industrial Injuries) Act came into force. The next step was to decide upon the division of cost between the National Coal Board and the National Union of Mineworkers and negotiations were started with the Union and the other unions concerned. It was eventually agreed that the men should contribute 4d per week and that the National Coal Board should set aside 4d a ton on the total output of coal. This meant that the National Coal Board would/
would be supplying six sevenths of the scheme. In June, 1948, the scheme was submitted to the Minister of National Insurance who laid it before Parliament, and it received approval by the end of July. Although the scheme came into force on 2nd August the National Coal Board made arrangements outside the Scheme to enable the miners to enjoy the benefits from 5th July, 1948.

The chief benefits provided under the scheme were:

1) A weekly supplement, normally of 20/-, to adults drawing injury benefit under the Act.

2) A weekly supplement to men drawing Disablement Benefit, usually of one-third of the National Insurance Benefit - but no supplement to the allowances for Dependents, Special Hardship, or Constant Attendance. After a man has been back at work for three months, the supplement may have to be adjusted to ensure that he does not receive more from his employer and from the various schemes than if he had not been injured.

3) A supplement to the widow of a colliery worker who is drawing Death Benefit under the Act, at the rate of 20/- a week if the widow is over 40 or is incapable of supporting herself, or is receiving a Children's Allowance under the Act; otherwise at the rate of 5/- a week.

It should be noted that national insurance benefits and those under the Supplementary Scheme are only drawn by law in cases of accident or disease occurring after 5th July, 1948 (the date the 1946 Act came into force). For cases which occurred before 5th July, payments continue to be made under the old Workmen's Compensation Acts. The National Coal Board was not anxious, however, to interpret the law too harshly. It agreed that Workmen's Compensation payments made after 5th July should also be supplemented, although there could obviously be no contribution from the injured employees concerned. There was no provision under the National Insurance (Industrial Injuries) Act, 1946, for dealing with these men, but the National Coal Board solved the problem by persuading the Minister of Fuel and Power to establish a scheme for these "old cases" under powers conferred on him by the Coal Industry Nationalisation Act, 1946. This scheme provided supplementary pensions of 20/- a week for men totally incapacitated, 10/- a week for partially incapacitated men out of work, and 5/- a week for partially incapacitated men who are in work.

The National Coal Board sought to deal generously with other categories. Certain ex-miners suffering from pneumoconiosis had been overlooked by the Pneumoconiosis (Benefit) Scheme, 1943, made under the Workmen's Compensation Act of that year (see page 222/). The Scheme catered for miners suffering from pneumoconiosis.
from the disease who had been employed in the industry between 22nd October 1934 and 30th June 1943 and who were not eligible for normal Workmen's Compensation Benefits. The 1943 Scheme had imposed a time limit for new claims; benefits were only payable in cases of total disablement (or death) occurring before 1st July, 1948. In spite of this, claims were still being submitted in 1948, and the National Coal Board decided to treat new claims as though there had been no time limit. Furthermore, the Board applied the "Old Cases Scheme" to these workers, thereby enabling them to secure supplementary allowances.

One aspect of the National Coal Board's Supplementary Scheme which deserves special mention is the manner in which it is administered. The reader will remember the grievances of the Midlothian miners under the old system, and how they resented the arbitrary and uncertain decisions which they felt powerless to challenge. This new scheme is controlled by a National Committee on which sit five representatives of the workers and five representatives of the employers. Four of the workers' representatives are nominated by the National Union of Mineworkers and one by the Ministry of National Insurance to represent workers who are not members of the National Union of Mineworkers; four of the employers' representatives are nominated by the National Coal Board and one by the Federation of Small Mines of Great Britain. The National Committee is responsible for administering the Scheme and its Fund, and local sub-committees operate in each of the Board's Divisions. Participation by workers' organisations in matters which concern them so vitally as industrial injuries is a very important step forward.

In 1949 the National Coal Board secured the approval of the Minister of Fuel and Power to a "Fatal Accidents Scheme", which came into force in February 1950. The story behind this further act of generosity by the Board is an interesting one. At many collieries it was formerly the custom to stop all work for one or more shifts when a fatal accident occurred, as a mark of sympathy. Some colliery companies before nationalisation had agreed to pay, or contribute towards, extra benefits for the widows and other dependants of men who were killed, on the understanding that the pit would not stop work. Following the example of these companies, the Board was anxious to set up a national scheme with similar objects; extra benefits for the dependants would be a tangible mark of sympathy, and output would not be lost. The National Union of Mineworkers was sympathetic to this suggestion, and a scheme was accordingly brought into operation by which a widow receives a lump sum of £150 or £250 depending on the number of children she has. Dependants other than widows/
widows also get benefits but at lower rates. All benefits under the scheme are additional to the normal benefits under the National Insurance (Industrial Injuries) Act and the benefits under the colliery workers' Supplementary Injuries Scheme. The National Coal Board and the National Union of Mineworkers agreed to share the cost; each were to make an initial contribution of £25,000 and current contributions from each would be in the neighbourhood of £60,000 a year. To finance the Union's share of the contributions, 1d per week is deducted from the pay of men participating in the scheme. The workmen are free to choose, colliery by colliery, whether to come into the Scheme. By the end of 1951 all but 33 collieries were covered, and £160,000 had been paid in benefits.
Pensions and Superannuation

The inability of the miner to insure adequately against the hazards of old age through his friendly society or his trade union led to frequent campaigns to secure a pension scheme for the industry as a whole. These demands continued to occupy the agenda of annual trade conferences from the early years of this century onwards. Little progress was made, however, with these demands until after the outbreak of the second World War.

Greater success attended the efforts of the miners to secure a national old age pension. Their strong organisation and militant spirit placed them well to the fore in the struggles of the trade union and labour movements to influence the various governments, select committees, and political parties of the day. The controversy over the old age pension was a long and arduous one. The Select Committee on National Provident Insurance was appointed as early as 1885; it was followed by the Royal Commission on the aged Poor (1893-95), the Treasury Committee on Old Age Pensions (1895- ), the Select Committee of the House of Commons on Aged Deserving Poor (1899), the Departmental Committee on the Aged Deserving Poor (1899-1900) and the Select Committee of the House of Commons on Aged Pensioners' Bill (1903). When the General Elections of 1906 gave a Liberal Government a great majority, and also returned the first strong group of Labour members, the influence of the miners was considerably increased. It was strongly applied, for instance, to secure the passing of those great Liberal measures, the Trade Disputes Act, the Workmen's Compensation Act, and the Coal Mines Act. And in 1908 came the Old Age Pensions Act which introduced for the first time the payment of non-contributory old age pensions. The pension was fixed at 5/- per week. Further Acts were passed in 1911, 1919, and 1924, and were consolidated in the Old Age Pensions Act, 1936. The means qualification subsequently stipulated that non-contributory pensions were payable on a sliding scale from 26/- per head (or 16/- for married women) downwards to 2/-, according to the amount of earned income. Under the National Insurance Act of 1946 contributory pension payments were fixed at 26/- weekly for single persons and 42/- for married couples, while the pension for widows became 10/- (under 60) and 26/- (over 60). Children's allowances were fixed at 5/- for the eldest child, with 3/- for other children. Until 1940 pensioners who could not supplement their pensions in any other way went to the Public Assistance for help. The Old Age and Widows' Pensions Act of 1940, by enabling pensioners to supplement their weekly income from the Assistance Board/
Board, established a tradition of self-respecting aid free from the stigma of the "parish", and this tradition was carried over into the 1946 Act. Under the National Assistance Act, 1948, supplementary pensions or other assistance were provided on proof of need. In assessing need, various resources were to be disregarded, including certain capital assets, the first 10/6d a week of superannuation payments, and the first 20/- of disability pension. The scale allowed 43/6d for a couple, 26/- for a person who was living alone or was a householder, and 22/- for any other single person over 21, for needs other than rent; (the rent may be paid in addition).

This brief survey does considerably less than justice to the development of national legislation relating to pensions, but it is merely designed to acquaint the reader with the broad national framework of social security within which the miner lived and worked. Although the miner had played a considerable part, as we have seen, through trade union and political action, to secure legislation beneficial to the working class as a whole, this did not preclude him from efforts to secure sectional pension rights within that wider framework.

The question of a pension scheme was raised again by the miners during the war. Unrest in the industry had been temporarily stilled by the Greene Award of 1st June 1942 (see page 54/above) but towards the end of 1943 discontent had broken out anew. This was made clear by the important debate which took place in the House of Commons in October, 1943.1 The Prime Minister had stated in this debate that if the miners thought that it would ease their minds to discuss the post-war arrangements with the Ministry of Fuel and Power, he would gladly authorise such talks so that "the uncertainty and harassing fears for the future shall be as far as possible allayed."2 Accordingly, the Secretary to the Ministry of Fuel and Power wrote to the two sides of the industry on 4th December 1943, proposing a series of meetings on post-war questions. The Minister suggested three topics to be discussed, one of which was workers' security, including the post-war situation. Pensions and workmen's compensation were prominent among these items, and meetings took place on 11th and 12th December 1943 and on 11th January 1944. But no solution upon these items was reached, and the emphasis was switched to the wages issue. The National Reference Tribunal's expression of opinion, during this period, that the wage system of the industry stood in need of overhaul (see pages 54/above) diverted the energies of miners, owners and Minister alike from consideration of future pension schemes to more urgent and immediate problems.

Post/Section 37

2. Ibid. 13th October, 1943. Col. 932.
Post-Nationalisation

The provision of pensions to mineworkers to supplement the national old age pension was an important item in the "Miners' Charter" which the National Union of Mineworkers submitted to the Minister of Fuel and Power in 1946. The Minister accepted this claim in principle, but it was agreed that the items in the charter should be implemented by instalments.

Nothing was done for some time, however, for the manual workers, although in 1947 the National Coal Board introduced a comprehensive superannuation scheme for all staff down to and including, deputies, weighers, timekeepers, store-keepers and similar grades. The Coal Industry Nationalisation Act gave the Minister power to make regulations for "purposes relating to pensions, gratuities, and other like benefits" and it was under such a regulation that the Board introduced this scheme. It was compulsory for those permanent employees over 20 and under 56 at the date of inception and earning over £260 per annum, while for others it was voluntary. Contributions amounting to 4% of salary were to be paid by members for up to 40 years, with a minimum of ten years, while the National Coal Board was to pay an amount equal to twice these contributions. On retirement from the Board's service, or after normal retiring age, which was to be 65 for men, members received:

(a) a pension for life amounting to 1/80th of the pensionable salary for each year, with a maximum of 40/80ths, plus a lump sum payment of 3/80ths of such salary for each year of service, with a maximum of 120/80ths;
(b) or an equivalent pension;
(c) on death within five years of retirement, the estate to receive the pension for the balance of the five years.
(d) Additional Benefits can be paid to secure certain family benefits.

The National Coal Board's contributions to this scheme represented an increase in the emoluments of those members of staff who formerly belonged to no superannuation scheme or belonged to one with benefits less favourable than the Board's scheme. The cost to the National Coal Board of providing for superannuation was about 4d. per ton of coal sold.

The miners were determined that they should not be overlooked in the National Coal Board's superannuation plans, and they continued to agitate for their pension scheme. When, for instance, the executive of the Trades Union Council/

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   Section 37(1)
2. National Coal Board
   London HMSO Page 109
Council reported to the 1948 Congress that the Government was postponing a decision pending consideration of the whole subject of pensions in nationalised industries. Mr. Horner declared that the National Union of Mineworkers was not prepared to delay making its claim to the National Coal Board for a miner's pension. The psychological moment to press the claim to a successful conclusion came during the fuel crisis in 1951. The Union leaders met the Prime Minister and the question of pensions was discussed. It is not impossible that gentle pressure from a ministerial level was placed upon the Board, for on January 11th, 1951, the Board accepted the principle of introducing a supplementary pension scheme. An agreement signed the following week between the National Coal Board and the National Union of Mineworkers was announced as follows:

"The Board found itself unable to agree to the claim of the National Union of Mineworkers for additional paid holidays this year because of the loss of output that would thereby be entailed. They had already accepted the principle of additional paid holidays. As an earnest indication of their determination to carry out this reform when the output situation permits, they have undertaken to make an initial contribution of £2,000,000 to a supplementary pensions fund when established. The Board also agreed in principle to a supplementary pensions scheme. The lines upon which such a scheme can best be formulated are to be worked out jointly between the Board and the National Union of Mineworkers. The scheme will be a contributory one, but until the discussions are completed it is not possible to say who will benefit or what the scale of the contributions or of the benefits will be."

Later in the year a scheme was worked out and approved by the Minister of Fuel and Power. Under this scheme the workman pays 1/6d weekly (surface workers 1/3) and the National Coal Board adds 2/- (1/8 for surface workers). Pensions are payable at 65 and range from 10/- to 35/- a week according to length of service and regularity of attendance at work; there are also benefits for widows and children. Since many mineworkers now getting beyond middle age have spent their working lives in the industry but would not otherwise qualify for a pension the Scheme provides for "back service credits" which will enable them to qualify for a pension of 10/- per week at 65. In addition to their regular contributions the Board made a special initial payment of £2 m. to the funds of the scheme (as promised in the January agreement with the National Union of Mineworkers) and also agreed to make deficiency payments to meet the cost of back service credits each year for 25 years. The scheme came into force on 1st January 1952.
CHAPTER VII.

Education, Training and Promotion Policy

The introduction of organised educational and training facilities in the Coal Mining Industry has been a very recent development. It is scarcely surprising that such schemes were not contemplated until the pace of mechanisation made them essential. Even then, as we shall see, they were brought into operation somewhat belatedly.

In the days of hand-wrought coal there was no thought of any formal training. As already described in a previous chapter, boys went straight down the pit at the age of twelve (and even earlier before 1843) where they usually joined their father. They worked their way through the various stages of "quarterman", "halfman", three-quarterman" until they became full miners at the age of eighteen. The boys graduated from one job to another, starting with filling and pushing the tubs, and ending by hewing the coal themselves. Upon their agility and efforts depended the combined remuneration of fathers and sons, a strong incentive for learning quickly. The only "education and training" the boys received were a few hearty kicks and blows if they were idle, and encouragement and praise if they worked well. It was a rough-and-ready system, and it meant that the transition from boyhood to manhood was swift and at times brutal. But it was upon such a system that Britain's industrial greatness in the nineteenth century was based.

It might be expected that this lack of training was paralleled by a lack of general education. In Midlothian, however, there is abundant evidence to show that this was not the case. The 1842 report revealed a fairly generous provision of schools in Midlothian mining villages and parishes. Armiston had three day schools and two Sunday schools; Newbattle had seven day schools and three Sunday schools; and Dalkeith had seven day schools and one evening school which opened from 7.30 to 9.30 p.m. There are similar favourable references to educational facilities in this area in the Statistical Accounts of Scotland and a Parliamentary Commissioner in 1851 went as far as to say:

"In entering into the state of education with persons desirous of promoting it/

3. Reports of the Commissioners for enquiring into ... pop. in Mining districts, 1851. Page 38.
it in the English mining districts, I have frequently taken occasion to refer to the much greater quality of work obtained from the children in the course of the day in good Scotch schools than in the generality of good English schools under similar circumstances ... the colliers' boys before they leave school will read fluently, learn the meaning of the usual prefixes and affixes, will be able to work discount and interest, and perhaps fractions, and will have gone over the map of the world ... they seldom stay much beyond ten years old ... in a considerable number of instances in the Scotch mining districts, where I have made the inquiry, I have found the evening school frequented by from seventy to a hundred boys and young men ... the hours are from seven to nine or half-past nine."

A Parliamentary Commissioner enquiring into the mining areas of Lanarkshire however, observed that "the Irish have lowered the habits of the Scotch portion of the population, and deprived them of the advantage they possessed of the higher average of instruction, which they owe to their having had an endowed parochial school in every parish for the last century and a half."

Nevertheless by the eighteen sixties schools were being provided by the coalowners at most collieries of any size, although they were not always appreciated by the children's parents. Hence the practice at some collieries of deducting payment for fees (for all children who should be at school) from the wages of the miner. The fees charged per child at the Marquis of Lothian's schools were 1d per month for each subject, while the Duke of Buccleuch's colliery school charged a flat 3d per week. These fees did not, of course, meet the cost of the schools, the balance being provided by the proprietors.

With the passing of the Education Acts in the eighteen seventies\(^1\) the provision of general education for the children of miners became the duty of the state.

For officials in the colliery some degree of education and training was obviously required in practice from the early nineteenth century onwards, although it was not required by law. Indeed, as regards Scotland, the inefficiency and haphazard conduct of many mines, as revealed by Commissioner Franks in 1842, leaves a marked impression of inadequacy in the training of these officials. "The main principles of ventilation in many parts of Scotland are ill-understood and as ill-practised as understood."\(^2\). Furthermore there seemed to be little understanding of the use of windlasses or balances, and "a little reflection/

\(^1\) Education Acts, 1870, and 1876
reflection would have prevented a vast deal of unnecessary and painful labour in the working of edge seams."

But perhaps the most serious evidence of lack of training which emerged from Commissioner Franks' visit to Midlothian was concerned with safety precautions. His revelations were so disturbing as to merit full quotation:

"In the absence of all satisfactory returns on this head, we have the authority of a medical gentleman well acquainted with the colliery district, that a week seldom passes without some serious accident occurring in one or more of the collieries, and several persons are killed or die in consequence of accidents every year. These accidents arise from the falling-in of the roof, the sudden and unexpected fall of coal before the collier has time to draw back, the rending of rope, etc. ... and this is fearfully confirmed by the witnesses whose evidence I have collected, and who bear testimony to a vast number of individual cases of this sort ... In Scotland there are no coroners to enquire into sudden and violent deaths, and serious accidents of an appalling nature frequently occur, and no notice whatever appears to be taken of them."

Commissioner Franks concludes his evidence by saying: "Where life is lost — when a human being has been suddenly or violently taken off from among his fellow creatures — I certainly was not prepared for the general apathy and indifference which prevails in these districts."

Although legislation was passed in 1842, and at frequent intervals thereafter, to improve safety in the mines, it was not until 1872 that an act was passed instituting Examination Boards for testing the competence of would-be managers, and stipulating that a colliery must be under the daily supervision and control of a manager holding a certificate of competency granted by the Secretary of State. In 1887 a new class of under-managers was established, requiring second-class certificates of competency, and in 1911 the system was extended to Surveyors, Firemen, Examiners, and Deputies who henceforth were required to hold certificates.

For first and second class certificates it was a condition of sitting for examination that the candidates should have had either five years' practical experience in mining, or three years of such practical experience if he held an approved degree or diploma. Half of this five or three years should have been spent in "actual practical work" at the face or elsewhere underground, or in its

1. Children's Employment Commission
   First Report of the Commissioners
   Mines
   HMSO
   1842.
   Vol. XV. Para. 362.

2. Ibid. Para. 613.

3. Ibid. Para 615.
its direct supervision or direction.

These regulations were obviously designed with the commendable intention that those who were to manage mines should have practical experience of them. But the effect of such regulations, as they emerged in the inter-war years, was to narrow the field from which managers could be appointed, and consequently diminished the number of men of high ability and good general education who might otherwise have entered the industry. Looking back, it appears that the balance was not properly struck between the advantages of practical experience and those of a liberal education. Surprisingly enough, the defect was one of excessive democracy - too many managers rising from the ranks the hard way, and insufficient men with a breadth of mind and resilience derived from a more "human" education. One National Coal Board official, with intimate knowledge of Scottish mines and miners, informed me that nine out of every ten Scots managers before the war were the sons of miners. Although this figure has not been substantiated it probably approximates to the prewar trend.

But this recruitment from a narrow field, and the consequent concentration upon practical experience and purely technical education, had unfortunate consequences. It meant that too few mining engineers saw the broad problems of the industry, or appreciated the extent of reorganisation required in the inter-war years.¹

With regard to the standards of the examinations taken there was some criticism of their low level. The Report of the Holland Committee² in 1930, and the Report of the Royal Commission on Safety in the Coal Mines in 1938³, recommended that the statutory qualifications of Deputies and Undermanagers should be raised and that statutory qualifications for colliery technicians and tradesmen should be introduced. With regard to the colliery officials the Holland Committee recommended that there should be two alternative systems of qualification; the first to consist of an extended oral examination of a practical character designed to appeal to the older man; the second to consist of a written and oral examination of a much higher technical standard suitable for younger men who had enjoyed opportunities for a wider general education. These recommendations were endorsed by the Royal Commission eight years later, but the outbreak of war delayed their application.

Let/

². Report to the Secretary for Mines of the Committee appointed by him to enquire into the qualifications and recruitment of Officials of Mines under the Coal Mines Act, 1930.
³. Cmd. 5890.
Let us consider the way in which ambitious boys could secure assistance for their studies. Apart from local education authority grants assistance was available from the Miners' Welfare Commission during the period of its existence. By the outbreak of war it had spent £754,798 on grants to 72 senior centres and eight universities. There was provision under the "Miners' Welfare National Mining Education Scheme" for scholarships for advanced courses in mining at approved institutions for students whose employers were prepared to release them from work for one day a week. For full-time students, a trust fund of £176,518 was set up in 1926, and by 1938 it was yielding an income of £8,000 which was providing sixteen university scholarships. Of these, seven were held by mineworkers and nine by the children of mineworkers.¹ Five of these sixteen were held by Scots applicants, two of them being from the Lothians. The Miners' Welfare Commission was alarmed, however, that mining courses tended to be recruited too largely from older students within the industry and not enough from ex-secondary school pupils. It had found a reluctance among young men of secondary school education to train in coalmining, and this had resulted in a scarcity of well-qualified men for official positions.²

It was not always easy, however, for employees to take classes, except in their own time. Even this last concession was not universal. According to an ex-colliery manager (now employed as Sub-Area Labour Officer, Lothians Area), Mr. Heron, he was refused permission by his company to take continuation classes, on the grounds that he was "colliery manager for twenty-four hours a day." Although in this case Mr. Heron had already acquired sufficient qualifications to be a manager and wished to advance his knowledge for personal reasons, the company's reply was indicative of their general attitude.

At a lower level grants were given for safety instruction at over 300 centres which were being attended (by 1937) by some 13,000 youths annually. Although the ostensible aim of these courses was to improve safety and health in the pits, it was hoped that they would encourage the youths to proceed to more substantial mining courses.³

The policy in the Lothians, with regard to mining education, was to spread grants over a wide number of students. In 1938, for instance, 36 students received grants towards evening classes, ranging from £1 to £5 per student, although larger grants were made to 25 other students.

The lack of training at all levels in Britain compared unfavourably with the

² Ibid. " 21.
³ Ibid. " 23.
the practice in other European countries. In Holland a comprehensive scheme for
the training of juveniles was started in 1929, and by 1938 there were 1,450
boys undergoing training. Preference was given to miners' sons who constituted
90% of the new recruits. The course, which could be embarked upon any time
after the age of fourteen, included both technical training in mining and a con-
tinuation of general education. Nine months after starting the course the boys
began work in a model mine in substitution for school work. They did not re-
receive a full hewer's wage until 23. Before reaching this standard, however,
they were examined by a specially appointed body, after taking a course of
fourteen lessons in the practice and theory of mining, including the answering
of questions about gas testing, ventilation, and safety regulations. If they
passed this examination they were given a hewer's certificate. In the event of
failing the examination they continued to receive a lower rate of pay. Further
education and training for qualified hewers were readily available; miners were
encouraged to attend evening classes to qualify as under-officials, and if they showed special promise - as full officials. These schemes did much in
Holland to raise the prestige of the miner. The reward for passing the various
examinations was not only a well-paid post but social estimation of a kind un-
known to the British miner. An additional benefit was the high standard of
work performed by Dutch miners. Furthermore, Holland enjoyed a low accident
rate. Training schemes were also available in Germany. A "hewer's certificate",
although not so elaborate as the Dutch certificate, was the necessary qualifica-
tion for full pay. There were also training schemes for steigers (underground
officials).

In contrast to these schemes the only "training" available to British boys
was what they could pick up themselves while performing one or other of the
numerous jobs available, particularly in connection with haulage operations.
Boys went to the coal face at the age of fifteen or sixteen.

The introduction of machinery weakened family ties by changing the nature
of coal mining operations. Under the old system, crude as it was, the boy's
father, or perhaps a near relative, with whom he had worked, had felt some
responsibility towards instructing him in his calling. With the loosening of
family ties in the mine the boy was left to his own devices without any con-
 tinuous tutelage. Deputies were often held responsible, it is true, to super-
vise the progress of young underground workers, but with all their many duties
these highly overworked officials could not attend adequately to the education
and training of the boys.

The
The only training generally provided was condemned with safety precautions and the minimising of dangers underground. In 1938 there was a step forward, however, when a Royal Commission recommended combining safety training with training in the most efficient use of machine.

The growth of the use of machinery in mines during the twentieth century presented a challenge which was not fully met. With the coming of electric power, machinery was put into the hands of untrained men and the poor results of mechanisation were due partly to this cause. In spite of the obvious need to improve the technical efficiency of British Coalmining, no properly organised training of entrants was insisted upon. Instead of a policy of training to increase efficiency, a policy of restriction of recruitment was embarked upon.

In order to give effect to one of the recommendations of the Samuel Commission, the Minister of Labour was empowered, under Section 18 of the Mining Industry Act, 1926, to "make regulations for the purpose of securing that in the recruitment of persons over the age of 18 years for employment to which this section applies, preference is given to persons who were employed in such employment during the period of seven days ending on 30th day of April 1926, or when last before that date in regular employment." The employment to which reference was made was "employment in or about a coal mine in the getting, handling, hauling, preparation and dispatch of coal." No regulations were in fact made, but the Mining Association gave an undertaking on behalf of its members to implement the intention of this section. The undertaking came into operation on 1st August 1927 and it was renewed in 1929. Under the shortage of labour arising out of the war the undertaking became superfluous, and it was suspended by the Mining Association with effect from June 1940.

By the time war came the coal mining industry was becoming increasingly manned by older age groups. In 1931, for instance, only 34½% of those employed were over 40 years of age, but by 1945 the over 40's had increased to 43½% of the total. In addition to this change in composition, there had been a sharp fall in the overall number of men engaged, as the following table shows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number of Wage Earners (below and above ground) in thousands.</th>
<th>Year</th>
<th>Average Number of Wage Earners (below and above ground) in thousands.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>1,227*</td>
<td>1944</td>
<td>710</td>
</tr>
<tr>
<td>1930</td>
<td>917</td>
<td>1945</td>
<td>709</td>
</tr>
<tr>
<td>1940</td>
<td>749</td>
<td>1946</td>
<td>697</td>
</tr>
<tr>
<td>1941</td>
<td>698</td>
<td>1947</td>
<td>711</td>
</tr>
<tr>
<td>1942</td>
<td>709</td>
<td>1948</td>
<td>724</td>
</tr>
<tr>
<td>1943</td>
<td>708</td>
<td>1949</td>
<td>720</td>
</tr>
</tbody>
</table>

*Prior/1. Royal Commission on Safety in the Coal Mines, Cmd. 5894.
3. Ibid. " 38
4. Cmd. 6600
Prior to 1922 clerks and salaried persons are included. In that year they numbered on the average about 24,000 and in 1946 about 21,000 inclusive in each case of clerks and salaried persons employed at headquarters offices. Since nationalisation the information about clerks and salaried persons at headquarters offices is not comparable. At the end of 1946 there were 13,800 clerks and salaried persons employed at the mines, and at the end of 1948, 18,900.1

The fall in manpower became acute at the beginning of the war, especially in the period 1939 to 1941 when many miners left the industry to join the forces or take up better paid work in munitions factories. The Government had to take drastic steps to secure additional manpower, for the pits. But recruitment was not just a matter of finding the men and putting them underground. They had first to be trained; and so it was under the impetus of national crisis rather than from idealistic motives that the first national schemes of education and training for the coalmining industry were evolved.

On 18th April 1942 a committee was appointed under the chairmanship of Sir John Forster. Its terms of reference were: "having regard to the reluctance of juvenile workers to enter the Coal Mining Industry to enquire into the opportunities for training and advancement and the general welfare of juvenile workers in the industry ... and to make recommendations thereon."2

In their evidence to the committee both the Mining Association and the Mineworkers' Federations agreed upon the need for training, although they differed over details. The Mining Association argued that the period of training should be worked out and applied on a district basis, taking account of different conditions and circumstances, and they considered that in many mines all that would be practicable would be the setting aside of a special gallery with a special "practical tutor" in charge.3 The Mineworkers' Federation, however, wanted an initial training period of three months in an unused mine, or part or section of a used mine not in production, to be acquired by the State for demonstrating to the new recruits every practical feature of mining life.4 There was general agreement, however, that the initial period of training should be compulsory, that it should take place during ordinary working hours, and that the trainee should be paid at the appropriate rate of wages according to the prevailing scale for juveniles. This general view was accepted by the Committee, and formed the basis of its recommendations.5

2. Committee on Recruitment of Juveniles in the Coal Industry, 20:7:42. Para. (1)
3. Ibid. Para (12)
4. Ibid. Para (12)
5. Ibid. Para (14)
an initial training period of eight weeks at a suitable centre, either at the
headquarters of the colliery or at a suitable mining school or institute.\(^1\)
There should be payment of travelling expenses and the provision of hostel
accommodation where necessary. The training schemes should be subject to the
approval of the Ministry of Fuel and Power,\(^2\) but their inspection should not be
added to the existing functions of Mines Inspectors who already had a lot to do.
Instead, specially designated persons should be appointed.

For mines officials there should be a training scheme ranging over seven
years, similar to the one already in existence under the Ashington Coal Company.
During this period a boy could rise to be an appropriately qualified official.\(^3\)
At every colliery a chart should be displayed showing the various stages through
which a boy might pass in this progress towards attainable adult occupations.\(^4\)
In this paragraph we have the origins of the much-vaunted scheme which was to
be introduced seven years later by the National Coal Board under the title of
the "ladder plan". Another authoritative source, the Reid Report, was also to
stress the need for a ladder plan in 1944: "As in the past, so in the future,
the industry must depend for the majority of its officials upon men who have
entered it as workers and risen through the ranks.\(^5\) But two "ladders" were re-
quired; the first would provide for the progressive training and promotion of
suitable men already in the industry, as they qualified successively to be
deputies, overmen and managers. The second ladder was to offer an opening for
a career as mining engineer to men drawn from all classes of society and from
all parts of the country.\(^6\).

In October 1943 the Minister of Fuel and Power announced that it had been
decided to direct men to the mines, although voluntary recruitment would con-
tinue.\(^7\) But it would be impossible to create first-class mining workers over-
night, and a training scheme would therefore be necessary for men coming fresh
to the mining industry.

Young men between eighteen and twenty-five who would otherwise be called
up for military service provided a useful source of recruitment. The method of
direction was by ballot, and these entrants (known as "Bevin Boys") continued to
be conscribed from December 1943 until May 1945 when the scheme ended. It was
an important consequence of the conscription of these boys that the Forster
Committee's/
Committee's recommendations for training were largely implemented.

A scheme worked out between the Ministry of Fuel and Power and the Ministry of Labour and National Service divided training into two periods. The first, for which the Ministry of Labour and National Service was responsible, lasted four weeks, and it aimed at toning up the physique of the boys and developing the muscles most required for underground work, introducing them for the first time to the pit and to underground conditions, providing them with the sense of working comradeship which the newcomer to mining before the war gained from living among and working with miners, and giving them an elementary knowledge of safety measures and the tools and equipment of coal-mining. Satisfactory entrants passed on to the second stage of training, which took place at the pits and lasted a fortnight. Training here was in the hands of the employers to whom the boys had been allocated. It was much less general and bore directly on the kind of job for which the trainee was being taken on, such as transport or haulage or repair work. The centres and the training schemes served not only Bevin Boys but also voluntary entrants to the industry.

The number of Bevin Boys who came to be employed at the coalface was small, not more than about 7,000, out of a total of 20,000, Bevin Boys engaged throughout the industry. The remaining 13,000 went to various sorts of underground work apart from coal-getting, such as the maintenance of roads, attending to track points, attaching and detaching coal tubs, and controlling the movement of underground transport. A few who had experience in mechanics or electricity before they passed through the training centres were employed on electrical or mechanical maintenance and repair work underground. The importance of the Bevin Boys, according to those officials concerned with his training and work during the war, seems to have lain not so much in his personal achievements in coal-getting as in the fact that he released more experienced workers for upgrading to the coal-face. This upgrading of men made possible by the direction of youths, compelled the introduction of further training schemes of a more advanced character for the men up-graded, and especially those who were being put on to the running and maintenance of coal-getting machinery.

Accordingly, a training centre for mines mechanisation was opened in Sheffield in December 1943 under the administration of the Ministry of Labour and National Service, the town being chosen because it stands next door to the Yorkshire, Lancashire and Midland coal-fields and about half way between those of South Wales and Scotland. The training here was both for electricians and mechanics and for those with no mechanical or electrical knowledge. Courses were/
were undertaken varying in length from 2 to 26 weeks. Between 1943 (December) and 1945 (September), about 1,500 men passed through the centre including those who received special training in American mechanised room and pillar mining. The Sheffield Mechanisation Training Centre was well supported by the best run collieries, although nominations for some of its courses proved disappointing. It was discovered that the growth of mechanisation demanded special training, not only for the men who were to operate or maintain the machines, but also for all grades of mining officials and technicians. The problems of mechanised room and pillar mining, led to the setting up of a senior officials' course at the University of Sheffield.

Thus, on the eve of nationalisation, there were already schemes of training in operation. The Ministry of Labour and National Service, by 1945, had set up five Adult Residential Training Centres to give preliminary training to adult recruits. One of these was at Muircockhall in Scotland. Altogether, these centres were taking 1,250 recruits at a time (this number was doubled after nationalisation).

One important limitation must, however, be borne in mind. Although the colliery companies before nationalisation were obliged to prepare schemes - to be approved by the Ministry of Fuel and Power - for the preliminary training of new recruits both above ground and in training galleries below ground, some of these schemes still existed only on paper at the end of 1945.

Post-Nationalisation

The 1946 Act contained three clauses which henceforth governed the provision of educational and training facilities in the industry.

The National Coal Board was made responsible for "activities conducive to advancing the skill of persons employed or to be employed for the purposes of any of the activities aforesaid, or the efficiency of equipment and methods to be used therefor, including the provision by the Board themselves, and their assisting the provision by others, of facilities for training, education and research." 3

The "activities aforesaid" referred to the various operations of mining, selling and supplying.

This clause was the most important insofar as it placed final responsibility for education and training completely in the hands of the National Coal Board, although/

2. Ibid. " 8 - 9.
4. Ibid. Section 1(2) (a), (b), (c), (d), (e),
although it left room for the delegation of duties and for the use of extra-
mural educational facilities.

The remaining relevant clauses were more general. One directed the Board
to secure "the benefit of the practical knowledge and experience of such
persons in the organisation and conduct of the operations in which they are
employed," and the other directed the Board to consult with appropriate
organisations upon "the organisation and conduct of the operations in which such
persons are employed and other matters of mutual interest to the Board and such
persons arising out of the exercise and performance by the Board of their
functions." It was under the authority of these two clauses that education
and training were included among those topics which belonged to the field of
consultation.

It will be remembered that certificates of competency for various officials
had been governed for many years by general regulations made under succeeding
Coal Mines Acts (the most important being the 1911 Act). Furthermore, from
1945 onwards, the Ministry of Fuel and Power had issued "training regulations"
for entrants to the industry. The Coal Industry Act of 1949 restated and
brought together the various powers of the Minister with regard to education and
training, and considerably extended his authority.

Henceforth the Minister of Fuel and Power could make general regulations
with respect to "all or any of the following matters . . .:"
(a) The appointment of, and the qualifications to be possessed by, persons con-
cerned with the management of mines or otherwise acting in or in connection
with the carrying on of mining operations and the duties to be discharged by
such persons or any class thereof;
(b) the granting to such persons as aforesaid or any class thereof of certifi-
cates as to the possession by them of such qualifications as may be specified
by or described in the regulations, and the cancellation, renewal and restora-
tion of such certificates, and the examinations to be undergone and the
qualifications to be possessed by applicants for such certificates;
(c) the conferment on the Board for Mining Examinations of powers and duties in
connection with all or any of the matters mentioned in the last foregoing
paragraph (whether in addition to, or in substitution for, any other of their
powers and duties) and the alteration of the constitution and style of that
Board."3

These/

Section 2(4)(b)
2. Ibid. Section 46(1)(b)(ii)
These regulations were to be made by the Minister as it appeared to him to be requisite or expedient, "having regard to the needs of the mining industry; changes in the methods of mining; the progress of education and training and the results of research."

The Board referred to in (c) became known as the Mining Qualifications Board, and its advice to the Minister determines whether approval be given to any certificates of proficiency introduced by the National Coal Board. After nationalisation the schemes introduced by the National Coal Board (either on their own initiative or at the instigation of the Ministry of Fuel and Power) fell into three main categories; training for new entrants, training for promotion, and training for management.

These schemes were to solve the problems which the National Coal Board inherited from the pre-nationalisation era. From our survey of this period two outstanding problems, it will be remembered, emerged. First, the growing complexity of mining techniques and the increasing use of machines in collieries meant that many more men would have to be trained to a high degree of skill. Second, in the field of management the industry was short of qualified men.

Training for new entrants:

Regulations now stipulate that no inexperienced person may be employed in or about a mine, except under competent instruction and supervision, unless and until he has been adequately trained and is competent to work without supervision. No one without previous underground experience of mining may be employed on work below ground in a coal-mine unless he has completed a prescribed course of training in practical mining work and theoretical instruction. It will be noted that the words "in or about a mine" mean that preliminary training is essential for all entrants regardless of age or intended occupation within the industry.

This preliminary training for boys is longer than for men entrants. The boy takes a course which by law must consist of at least 264 hours instruction, although in practice the course is much longer and usually last 16 weeks. The boy attends a training centre which is attached to a colliery. He is taught mining, arithmetic, English, civics, and physical training; and he spends about half of the time getting practical instruction at the colliery; much of it in underground galleries set aside for training. He also visits other collieries to see different methods of working.

In/1

In June 1952 I paid a visit to the Lingerwood Training Centre which serves the Lothians area. Here 79 boys aged from 15 to 18 were engaged upon a 16 weeks education and training course. The Centre had been started in March 1945, but at this time the boys had received only practical training. The educational side had been looked after by the local authority, but it was alleged that the boys were wild and unruly when placed among an ordinary class, and exerted a bad influence upon the other boys. Whatever the truth of this statement, the Midlothian County Council suggested, after nationalisation, that the boys should henceforth receive their education as well as practical training at the centre, and they offered to pay the salaries of two lecturers who should teach the boys at the centre instead of a local school. These lecturers were accordingly appointed; one teaches mining science up to the standard of the second class mining certificate, and the other teaches workshop practice, woodwork, metalwork, drawing, English and physical training. The National Coal Board, for its part, employs a Training Centre Manager and seven instructors in mining operations.

The Manager, Mr. Smith, is a local man with a long experience of almost every operation in the industry. Starting work at 14, he became oversman at the Arniston colliery. In 1945 he became an instructor at the Lingerwood Training Centre. His first course was attended by three boys, but he extended the numbers by personal contacts in the neighbouring villages. Boys would recommend the course to their friends who would stop him in the street to ask: "Can I come on your course, Mr. Smith?" In this way the number of entrants was increased. "Of course it's all done through official channels now", Mr. Smith hastened to reassure me. Now the centre is working with twice as many trainees as centres in any other division. Most boys come from the immediate vicinity, but some come from as far as Musselburgh.

The scheme carried out at Lingerwood is something more than a course of practical training. It also aims at giving the boy a view of his place in the industry, and of his rights and responsibilities. When one remembers the past struggles and frustrations of the industry, the potential good which can arise out of giving these boys a new perspective offers new hope for the future. My observations at Lingerwood, my talks with the staff — nearly all ex-miners, and full of enthusiasm — and with the boys have convinced me that here at centres such as this is the key to industrial goodwill. This is where the vital battle is being fought to secure an intelligent relationship between management and men; if the battle is not won here it will never be won in later years, when prejudices have hardened and the influence of older men has exerted itself.
The course provided is an excellent one. Upon the technical aspects of the course I am, of course, unable to offer any critical judgements and I have relied upon information supplied to me by instructors and boys. But from the wider viewpoint of industrial relations I would advance unqualified enthusiasm for all that is being done. To enable the reader to judge I have set forth in detail the syllabus of the scheme.

The course covers general education, physical education, mining science, handicraft and workshop practice, and mining.

The aims of the general education section are described as:

1) To make the boy more aware of some worthwhile aspect of life which he can reasonably be expected to comprehend, so as to encourage him to make the most of his leisure.

2) To help him towards an intelligent grasp of some of the problems that arise in daily life.

3) To stimulate the boy's interest in national and world events and to lead him to adopt a critical rather than a passive attitude to modern publicity and propaganda.

4) To help him to realise his relationship with the community (i.e., some of the duties and privileges of citizenship) and the ways in which nations depend upon each other.

5) To continue practice in self-expression, mainly oral.

6) To give a few inspiring examples of man's achievements.

Although these aims might seem ambitious the actual syllabus follows them as closely as possible, as described below:

A. The use of leisure.

(1) "Killing time and enjoying it." Discussion of the ways in which boys spend their leisure.

(2) Books and reading: discussion of some boys' weekly "thrillers" and attempt to wean boys from this type of reading by introducing them to a few books in which escapism is tempered with realism, e.g., Haggard's "King Solomon's Mines", Stevenson's "Kidnapped", Masefield's "Jim Davis", Conal Doyle's "Sherlock Holmes". There is a small class library containing about three dozen books, and the boys are encouraged to use their public library.

(3) The Films: appreciation by the boys of films seen in the local cinemas; reasons for likes and dislikes; discussions of improbability of truth to life.

(4) Sport: discussion of merits of various games and teams, leading to definitions of "team-spirit" and "sportmanship".

(5) Five-minute talk on hobbies.

B./
B. Modern publicity and current affairs

(1) The Newspaper; study of make-up of papers brought by boys; different kind of news; headlines, interpretation of news-paragraphs; study of current affairs based on this.

(2) Advertisements; development of critical attitude.

(3) Radio Programmes; study of one day's programme in "Radio Times."

C. The worker and the citizen

(1) The young worker in 1800 and 1952; a contrast.

(2) Trade Unions, why and how they developed.

(3) Local government; indication of some of its functions, e.g., Roads, parks, public health, police.

(4) A day in Parliament.

(5) The breakfast and dinner table, a reminder of the sources of our food and the main trade routes.

D. Expression in speech and writing included above, plus:

(1) Writing of letters for everyday occasions.

(2) Debates

(3) The Scots vernacular, a few poems and a short story.


Clearly, in view of the limited time available, the syllabus does not aim to transmit a large volume of information under this "general education" heading; it aims rather at the transmission of "attitudes", and within its limits it succeeds admirably.

The mathematics and drawing classes give examples freely from mining; the application of measurement of volume, for instance, to a coal face, to the capacity of tubs and waggons, to the volume of air flowing through an airway, water through a pipe, and debris from shaft sinking. Then there are typical "pay line" calculations, income tax assessments, and simple graphs of statistical information, e.g., variation in temperature or in output of a mine.

Under physical education the centre carries on from day school training the development of fitness of body and character. Again the requirements of mining are borne in mind; boys are taught, for instance, the technique of lifting and carrying objects of varying shape, weights, and sizes to lessen the risk of hernia and back strains in everyday work; in first aid rescue lifts, and in personal hygiene in such things as the use of pithead baths. But the course also includes the usual recreational and competitive activities.
Mining science is concerned with elementary geology, heat and gases in coal mines, water vapour in the air, ventilation, mechanics, electricity, and weights and measures.

Handicraft and workshop practice covers the handling of tubs and the operation of machines, and the maintenance and correct use of tools. Lessons take place in the fitting shop and the electrical shop.

Mining includes lectures on the history of the industry, coal and its products, layout of surface plant, instructional visits to surface of the colliery, and shafts and pit bottom, haulage, coal-getting, and shotfiring. There are also lectures or practical work on mine rescue work, miners' diseases, mining as a career (particulars of positions, qualifications required and salaries of various posts in the industry), contrasts with entrance twenty years ago, and present facilities in the fields of education and welfare.

What impressed me most was the alertness and enthusiasm of the boys for the machinery which they were learning to operate. There was no question of "going slow"; they had all the enthusiasm of youth for mechanical toys and electrical devices. This enthusiasm, if it is preserved through manhood, will be the most valuable asset of the British coal industry. It is an enthusiasm which can secure full workers participation in the affairs of the industry, and by linking increased production to wages and hours of work can solve many of the present frustrations which bedevil the conciliation machinery.

I discussed the course with three miners' sons; George Shillinglaw, aged 15½ of Musselburgh; John Gentleman, aged 16 of Dalkeith, and Alexander Mackintosh, aged 16, of Newtongrange. All of them were enjoying the course, and looking forward to their career in the industry. When asked whether their fathers had approved their entry into coalmining, the gist of their replies was the same in each case. "Yes, it's different now from when I was a boy." If these boys are entering the industry with the knowledge that they are enjoying advantages denied to their fathers, the prospects for co-operation with management should be better than they have been in the past. Such an attitude is a valuable foundation for the excellent instruction which they seem to be receiving at this training centre.

The National Coal Board has opened 74 training centres to which boys come each day from their homes or lodgings. In addition to these "Group Training Centres" there are three residential training centres. One of these - Middleton Camp, near Edinburgh, is in the Scottish Division. About 120 boys from 15 to 17 attend each course (about 25% come from the Lothians coalfield) and the cost is shared between the Board and the Education Authorities who provide/
provide teachers and most of the equipment. The boys receive practical training at a neighbouring pit, spending alternate days at the pit and in the classroom. The idea is that they practise in the training gallery what they learned in class the day before.

For adult recruits (new entrants to the industry) the preliminary training period is three weeks. Adult recruits who come from mining areas usually attend Group Training Centres of the non-residential kind. Immediately after the war recruits from outside the coalfields went to one of five adult residential centres. These centres were then particularly useful for foreign entrants. Polish recruits, for instance, were admitted from March 1947 onwards, and, after initial opposition from some branches of the National Union of Mineworkers, settled down surprisingly well after their training periods. In some districts there were however, waiting periods of several weeks before Poles who had completed their training were admitted to the industry. The National Coal Board had agreed that no Pole should be placed in employment without the consent of the local branch of the National Union of Mineworkers, and this agreement was not always forthcoming immediately. With the "breaking-in" period of the training course, however, assimilation was not as difficult as it might have been. Similar success would have crowned the entry of Italian miners at a later date but for the intense campaign of a small minority within the industry who were determined to drive the Italians from the country.†

In 1949 all the residential training centres were closed down with the exception of the Scottish Centre. In England and Wales all recruits, whether from the coalfields or not, were diverted to the Group Training Centres.

As already stated, a further period of training is necessary for adult entrants before they can work at the coalface. The extent and nature of this training is governed by the Minister's regulations, and the extended powers the Minister now enjoys in this respect makes it easy for him to vary the regulations from time to time to suit the needs of the industry. In 1947 coalface training consisted of a minimum of 80 days below ground under the supervision of a specially selected workman. For the first operation to be learned 60 days were required and for each additional operation a further 20 days. The regulations required that not more than four adults should be trained at one time on a coalface partly used for normal coal production. These regulations seem to have represented the peak of post-war idealism, when elaborate "educational and training schedules" were rushed in to herald the new dawn. Imposing and enlightened as they appeared on paper, they did not work in practice. The views of one miner, whom I interviewed, upon some of the early training:

† For further details on Italian Labour - Evidence of Sir Hubert Houldsworth, Q.C. D.Sc. to the Select Com. on Nationalised Industries, HMSO, 29:10:52. Para.
training regulations are unfortunately too expressively cynical to be reproduced here. On one point, however, he was enthusiastic. Owing to inadequate supervision he was able to sleep through most of his training period which left him fresh and eager to spend his guaranteed wage during his time off. His personal views were strongly inclined towards a considerably longer period of training.

The "four adults" limitation was eventually dropped. The National Coal Board still, however, encountered difficulty with the setting aside of faces or parts of faces. This meant that the faces could not be used for immediate production or the development of new production. More complications were added by the introduction of the Five-Day Week, which meant fuller attendance of face-workers on Monday to Friday. Consequently, even less face room could be set aside for training.

In 1949, after gaining the consent of the National Union of Mineworkers, the Minister made further amendments to the regulations. He reduced the training period for men being trained at coalfaces used partly for normal production. Formerly men on these "part production" faces had to spend longer in training than other men being trained at coalfaces set aside for the purpose. Henceforth the training period was the same for both. The Minister also gave the Colliery Manager discretion (after consulting the Training Officer) to reduce the period for learning a new doalfield operation to less than 40 days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Boys</th>
<th>Preliminary Training</th>
<th>Coalface Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>28.5</td>
<td>6.6</td>
<td>35.1</td>
<td>6.1</td>
</tr>
<tr>
<td>1948</td>
<td>33.8</td>
<td>7.8</td>
<td>41.6</td>
<td>15.7</td>
</tr>
<tr>
<td>1949</td>
<td>15.7</td>
<td>9.1</td>
<td>24.8</td>
<td>16.6</td>
</tr>
<tr>
<td>1950</td>
<td>11.6</td>
<td>8.9</td>
<td>20.5</td>
<td>13.8</td>
</tr>
<tr>
<td>1951</td>
<td>17.8</td>
<td>12.7</td>
<td>30.5</td>
<td>15.2</td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-1949</td>
<td>6.8</td>
</tr>
<tr>
<td>1949-1950</td>
<td>8.5</td>
</tr>
<tr>
<td>1950-1951</td>
<td>9.1</td>
</tr>
<tr>
<td>1951-1952</td>
<td>10.2</td>
</tr>
</tbody>
</table>

1. National Coal Board "Coal Figures"
2. Ibid.
Training for Promotion

In 1950 the National Coal Board brought into operation its "Ladder Plan". This was a national scheme offering boy entrants an opportunity of qualifying in any technical branch of the industry or rising to any level commensurate with their talents. Out of a recent course for 79 boys at Lingerwood Training Centre 21 boys were put forward for further education, thereby ascending the first rung of the Ladder Plan. The plan was suitably flexible to allow a boy of promise who entered the industry at 15 years of age or thereabouts to reserve his final decision upon his particular trade or employment until he had been in the industry at least two years. Furthermore the training was designed to provide under-officials with an understanding of the work of tradesmen and technicians and vice versa. To this end, boys aiming to become tradesmen and deputies take a common course during the first two years, and at the end of that time, having become acquainted with the industry, they begin to take separate courses as tradesmen and under-officials. These courses last a year. At about 19 boys take a "General Certificate" (one for tradesmen and one for mining) and this marks the end of their theoretical studies. Further practical training is, however, required. Tradesmen undergo a two-year "improver" course to complete their apprenticeship, and thereby become eligible to practise as skilled tradesmen. This stage is usually reached at about 21 years of age. Boys hoping to become under-officials must also have further practical training and experience. Those wishing to become deputies, whether they have the General Certificate or not, must pass an oral and practical test. One purpose of the Ladder Plan was to enable promising young men to make quick progress in the industry, and for men who hold the General Certificate in Mining and have completed their practical training the legal minimum age for Deputies was reduced from 25 to 23. Men who have not taken the General Certificate but have shown that they are suitable to be under-officials will still be able to become Deputies by taking the oral test alone, and for this category the minimum age continues to be 25. For Overmen (the next rank upwards) the minimum age for General Certificate holders was reduced from 27 to 24. Promotion to Overman requires practical experience, but no additional theoretical or practical tests are given.

Part-time release is granted for potential deputies to attend a theoretical course at technical colleges, followed by a shorter full-time or part-time practical course at selected collieries.

After nationalisation it is doubtful whether enough was done at a national level, however, in the training of deputies in management and leadership. A start/
start was made at the National Coal Board training college at Nuneaton. The primary purpose of this college (which the Board took over from the Ministry of Fuel and Power) was, however, the teaching of potential training officers, and by 1949 this purpose had been achieved. Most pit training officers, instructors and managers of group training centres had attended courses, and the Divisions expressed their desire henceforth to make their own training arrangements. Accordingly the National Coal Board closed the college in September 1949. The subsidiary feature of the Nuneaton school - the experimental courses for deputies - was therefore brought to an end. At the time of the closing of Nuneaton only eleven courses for deputies had been held, attended by some 160 deputies out of the National Coal Board's total force of 20,000.

The responsibility now lies with Divisions to arrange courses in management leadership and human relations for the benefit of deputies and other supervisors. This new arrangement has led to a marked improvement, in the Scottish Division, in the training of deputies. In 1952 ten residential weekly courses for deputies were held at Newbattle Abbey, 32 deputies attending each course. The subject of the course was "human relations". The Scottish Division was one of the first to introduce deputies' courses of this kind, and all the other divisions have not yet followed Scotland's lead.

According to Mr. Michael Deery, one of the Scottish Division's "Human Relations" instructors, the deputies found the courses very valuable. Their only criticism was that the miners needed the courses more badly than deputies did. The job of teaching 80,000 Scottish miners the art of "human relations" is one which the National Coal Board has so far shrunken from tackling. And yet, as the deputies pointed out, it is the most important task of all.

A separate ladder of promotion has been instituted for boys training to become surveyors, colliery technicians, and under-managers. They take a common course, however, for the first two years and specialise in their third year. Then at 19 they take an "Ordinary National Certificate". The next qualification is a "Higher National Certificate" requiring three years' further study. For promotion to responsible posts, however, practical experience in addition to these certificates is required.

The Plan does not divide the industry into "non-competing groups"; horizontal as well as vertical movement seems to be possible. Men who have taken the Ordinary National Certificate but do not continue to study for the Higher National Certificate will not have wasted their time. They can qualify as tradesmen or deputies after further practical training and their Ordinary National Certificate will exempt them from taking the General Certificate. Those/
Those students who have started out to get the Ordinary National Certificate but have not yet taken it will be able to transfer to the course leading to the General Certificate; and boys who have been preparing for the General Certificate and show promise will be transferred to the courses leading to the Ordinary National Certificate and, in time, to the higher posts. For their first two years on the "ladder" all the students, whether they are training as tradesmen or deputies for the higher posts, will get their practical experience in workshop and pit together.

By 1951 the National Coal Board had managed to secure the co-operation of professional institutions and local authorities in standardising examinations and arranging courses of study. A National Advisory Committee of Mining Education, representing various professional bodies, ministries, and other interested organisations, was established. In addition a Joint Committee of the Ministry of Education and profession institutions was set up to award National Certificates to intending mining surveyors and engineers. With regard to examinations for tradesmen and junior officials the National Coal Board co-operated with the City and Guilds of London Institute.

By 1952 some 10,000 young people in the mining industry were being allowed one day a week off to attend courses. These students also attend evening classes in their own time, and with financial assistance from the Board.
Training for Management

So far we have been following the progress for boys of 15 right up to the level of undermanager, colliery technician or surveyor. But his prospects of promotion do not end at that point; there are facilities for him to carry on to the level of colliery manager or to hold various other technical management posts, or higher posts in electrical and mechanical engineering. Access to these posts was always open, of course, long before nationalisation, but there are now more facilities for training and study. At this level of appointments other entrants join the stream - the graduates. The National Coal Board has devised schemes to cover both categories.

To begin with, it must be remembered that all training schemes for colliery managers must be based on the statutory regulations in the Coal Mines Act, 1911, which prescribes three main conditions. First, a minimum age of 25 years; second, practical experience of not less than five years, or in the case of an approved diploma and degree three years; third, a first-class certificate of competence for managers, to be awarded by the Board for Mining Examinations.

It had become obvious even before vesting day, that the coal industry was short of professional engineers, mining surveyors, and technically qualified men to fill the top posts. It was estimated that about two hundred graduates would be needed annually; this was twice the number entering the industry annually before nationalisation. The National Coal Board consequently offered scholarships in mining and other technical subjects to boys leaving secondary schools and to young men already employed in coal-mining. These scholarships cover tuition fees, living costs and visits to collieries during the vacation. The minimum qualification for candidates from secondary schools is the Higher School Certificate. Those candidates from within the industry have to produce evidence that they are likely to benefit from a university course. Selection awards are made on the basis of examination results and of an interview by a board of National Coal Board representatives and university professors.

The following table shows the number of awards since the inception of the scheme:

Numbers of awards of National Coal Board Scholarships, 1948-1951

<table>
<thead>
<tr>
<th>Year</th>
<th>Scholars within Industry</th>
<th>Scholars from outside the Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Mining</td>
<td>In other technical subjects</td>
</tr>
<tr>
<td>1948</td>
<td>44</td>
<td>14</td>
</tr>
<tr>
<td>1949</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>1950</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>1951</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

| Totals | 14 | 62 | 13 | 88 | 33 | 82 | 22 | 66 |

In/
In 1951 the first 28 to graduate under this scholarship scheme started their careers in the industry.

An important development took place in 1950 when a new three-year course described as "directed practical training" was introduced for graduates selected as potential managers. This course is based on a syllabus worked out for the Board by the Institute of Mining Engineers, combining higher technical instruction with tuition in the fundamentals of management. Non-graduates considered likely to develop into managers are also eligible for the scheme, and two hundred trainees are selected by the Divisions for this course every year. During the period of training a salary of £400 rising to £550 is paid.

The most important part of the course, from the standpoint of industrial relations, is the training in administration and labour relations. Each year trainees attend a fourteen-days residential course at various universities covering the status and responsibilities of the colliery manager, the place of the manager in the organisation of the National Coal Board and his relations with the worker. This last aspect covers conciliation and joint consultation. The evidence of a Board official, Mr. George Morton, who has lectured upon this subject is that his audiences are very alert and interested in the machinery which has been evolved for this purpose, and the attitudes required for its success. It is impossible to exaggerate the importance of this part of the course. Here are gathered together the men who will occupy the front-line positions in industrial relations in the future; upon their sympathy, sense of balance, and intuition depends the future of the British coal-mining industry. They will work in far easier conditions than their predecessors, those "hard-working, adventurous and self-reliant men, who ... if they were hard taskmasters ... worked hard themselves."¹ But the new conditions of full-employment and industrial partnership will mean that these young men will need additional qualities, qualities that it was not so necessary for their predecessors to possess.

Certainly no expense is spared in the National Coal Board's new course to broaden the vision of their potential managers. The third year of each course consists of visits to other coalfields, and, where possible, abroad. Since the scheme started visits have been made to collieries in France, Germany, Belgium or Holland. Trainees spend a month at these foreign collieries.

The National Coal Board continued to develop more systematically the practice of affording opportunities for mining engineering students, in the vacation/  

vacation to visit collieries before entering the industry. This had been done in pre-war days, but the advent of nationalisation made possible the provision of a general scheme. The Professors of Mining specify the work which their students should do and the National Coal Board then places the students at collieries during their vacations and arranges that their work should be properly supervised.

With regard to existing managers of all grades there has been little provision of organised training in the industry as a whole, but courses have been started in Scotland, at Newbattle Abbey, on the lines of the deputies' courses. These provide instruction in management and labour relations for colliery managers and agents.
Miscellaneous Educational Facilities

Apart from technical and management education the National Coal Board has tried to develop "education for participation" in the affairs of the industry. The first aim of the National Coal Board was to give every person working in the industry as clear a view as possible of his work in relation to that of other staff, and to demonstrate how the interests of the employees, both as citizens and workers, were identified with those of the Board. "Everyone must understand how important the industry is to the nation's welfare and each must realise the part he plays in it." With the majority of miners this aim has certainly not been realised, although it has come closer to fruition with the supervisory and managerial grades. With new entrants, as we have seen, there is provision at training centres for lectures upon the general organisation and problems of the industry.

In the wider context mentioned by the National Coal Board the Scottish Division has taken the lead over other divisions. In 1949 a one-week's course was held at the Residential College at Newbattle Abbey on "Problems of the Mining Community", and it was attended by area education and training officers, sub-area agents and under-managers. Several courses have been held since then. The Division has also arranged a school at the University of St. Andrews, attended by 22 officials of all grades and 38 miners.

Courses on joint consultation have also been held. Before the closing of Nuneaton College, twelve courses were held for the Secretaries of colliery consultative committees, at which 150 students attended. The syllabus of these courses covered the structure of the National Coal Board and the consultative machinery, the technique of committee procedure and minute-writing, the technique of communication, informal consultation and discussion groups. The arrangement of courses of this kind has now been taken over by the Divisions, but they continue to cover only a small section of the industry, chiefly such minor officials as managers' clerks.

Since nationalisation there has been a new fashion - that of the "Summer School". The first school was held in August, 1947 at Cambridge, and it was attended by men and women of many grades from all the coalfields. The aim was to give them an overall picture of the industry, and learn the importance of their jobs in the scheme of things. The conference was addressed by the Minister of Fuel and Power, the Chairman of the Federation of British Industries, and the General Secretary of the National Union of Mineworkers. The Summer School is now...

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London: HMSO
Page 245
now a regular annual event, held at either Oxford or Cambridge, and some 459 employees attend each conference. In 1949 only 47 of this number were miners, one from each area, and by 1951 the number of deputies and miners combined was given as 100. This still represents an unduly low percentage of the manual workers of the industry. Although these conferences have provided valuable publicity and information, the fact remains that "conference-mongering" is still largely the prerogative of the white-collar worker, and the miner is not yet participating as much as the National Coal Board would have us believe him to be in this industrial education. To Bob McTaggart, as he cycles home from Arniston Colliery every day, Oxford and Cambridge are just as remote as they ever were.

Other efforts of the National Coal Board to spread industrial education include the use of publications and films, although there is nothing particularly novel about these. The Pit Relations Division of the Ministry of Fuel and Power paved the way during the war, not always with much success. In 1947 the National Coal Board started a monthly magazine "Coal", designed to give news of what was going on in the industry and in other industries dependent upon coal. By 1951 the circulation of "Coal" had reached 80,000.

The Education and Training branches of the National Coal Board also publish every quarter a magazine "Outlook" which deals with the theory and practice of education and training, and describing developments in this field. Four thousand copies are distributed to managers and training officers throughout the industry. In addition, one or two newspapers and wallsheets are published in the coalfields.

In 1947 the National Coal Board started a monthly newsreel "to show the coal industry to the coal industry". This newsreel is distributed through commercial channels to cinemas in the coalfields.

The National Coal Board has also prepared an "educational unit" consisting of a film "The Miner", four coloured film strips and two wall-charts, designed for use in schools.
Non-Industrial Staff

There have been no spectacular improvements since nationalisation in facilities for non-industrial staff. The Scottish Division has gone further than the other divisions in devising a scheme for providing part-time education for office staffs. Most of the junior courses are common to the junior staff in all departments, but senior courses are of a more specialised nature being biased towards the work of particular departments such as Secretariat, Finance, Marketing, Legal and Insurance. The National Coal Board has agreed to assist students in respect of travelling expenses, time off, cost of tuition fees in approved classes over a certain amount, and paid leave to employees for the purpose of sitting examinations. There is also assistance for those taking approved correspondence courses.

Promotion Policy

Promotion for industrial workers in the days of private ownership was limited by the size of the undertaking to which they belonged. Promotion to under-official in the pit was determined entirely by the pit manager, in the light of minimum technical qualifications prescribed by law for certain posts. For other posts no uniform policy of promotion was in operation. With regard to staff appointments - particularly senior posts - there was competition among the colliery companies to obtain the best men. Posts were thus filled from a wide field within the industry; many companies advertised vacancies and selected from the list of applicants the man they thought would be most satisfactory. This was not always true, however, of the less prosperous companies, who could not afford to pay high enough salaries to attract a long list of applicants.

Post-Nationalisation

No far-reaching changes have been introduced since nationalisation as far as the industrial employees of the National Coal Board are concerned, although there have been some amendments in the standards of various qualifications. For all employees the criterion is merit. Promotion depends on ability; and age or seniority is only admitted as a deciding factor between two candidates of equal merit. In addition, of course, there are the various statutory regulations regarding certificates, length of experience, etc. for certain specified positions. Promotions up to and including the grade of overman are made by the pit manager, and no advertising outside the pit takes place. What often happens in practice is that if a vacancy in this range is to be filled at some future date, the manager encourages a man whom he considers would be a suitable/
suitable choice to study for and sit the required examination for the statutory qualification.

One problem in the coal industry is that many men who would be excellent material for the supervisory grades refuse promotion because of the loss of earnings it would involve. For example, if a faceworker is promoted to deputy he might well lose a third of his pay. It is not unknown for faceworkers to earn up to £1,000 a year, and the diminished pay and increased responsibility which would result from taking a supervisory post induce men to stay at the face as long as possible, perhaps delaying acceptance of promotion until advancing age reduces their earnings. This means that the quality of candidates who offer themselves for supervisory grades is lower than it ought to be, in spite of the efforts of the National Coal Board. Hesitation to accept promotion cannot be divorced from candidates of status and prestige; the tendency since nationalisation to undermine the authority of the deputy and oversman has slowed down recruitment from those miners who would be willing to accept responsibility if conditions were favourable to its proper exercise.

For non-industrial staff the criterion for promotion is also merit. The National Coal Board's promotion policy for these employees, as outlined in 1949, has two objectives; first, to see that the most suitable person is selected for every vacancy, and second, to give every man a fair chance to rise to a position commensurate with his abilities. The Board's avowed policy is to "fill most of the senior posts on their staff from among people already employed in the industry."1 In future many of those who achieve promotion to the higher ranks will have entered the collieries as mineworkers, and by means of courses of study and experience provided under the Ladder Plan will have joined the ranks of management. Others will be men and women who have been recruited into clerical, administrative or specialist posts straight from school or university. Thus, the National Coal Board declares, whatever their educational origins, all will have opportunities for learning their job thoroughly and, as time goes on, of broadening their experience. Except for a few of the most senior appointments, vacancies will be advertised over a field varying in each case with the level of the post to be filled. For posts above the level of Assistant Secretary, advertisement will be on a national basis, while more junior posts will be advertised throughout the Divisions, Areas or smaller fields. In certain circumstances, vacancies may be advertised over a wider field, or outside the industry.

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1. National Coal Board
Annual Report and Statement of Accounts for 1949
London HMSO Page 105.
industry. Any "staff" employee of the Board, whether within the immediate field of advertisement or not, may apply for any vacancy, not necessarily through his superior officer. An employee may also apply through his superior officer for his name to be put forward to other Divisions, Areas or Sub-Areas or Groups for consideration for posts as they become vacant. There are, of course, legally prescribed qualifications to the colliery managerial grades, but on the clerical side there are no specified qualifications for the higher grades. This disparity has added to the suspicions felt by the technical officers towards their administrative and clerical colleagues. In some cases there has been very strong feeling about the apparently poor qualifications of senior clerical officers, although the National Coal Board has usually "played safe." Welfare officers, for instance, were recruited in large numbers from the old Miners' Welfare Commission, and labour officers from war-time Ministry labour staffs. Many clerical officers were taken from the staffs of the old colliery companies.

Thus, for non-industrial staffs, vacancies are advertised and selected applicants are interviewed by panels composed of senior members of the local staff, although appointments to certain senior posts must be sanctioned by the members of the National Coal Board. Local panels involve differences in attitude between one division or area and another. For instance, the Scottish Divisional Welfare Officer has very strong private views as to the kind of men he wants to see in his department. These views are based upon over twenty years' experience of welfare in the coal industry and his views usually prevail on the selection committee. The background or experience which he favours in an applicant (and, in this case, more particularly the background which he views with strong antipathy) differs widely from that preferred by selection panels for comparable jobs in other divisions.

As we have seen, there is no official participation by employees in the procedure for deciding promotion, although unofficial pressure is exercised from outside the industry by the trade unions in the case of certain appointments. It is perfectly proper, however, for those engaged in the industry to question and discuss the Board's promotion policy, through the normal consultative machinery. But it must be emphasised that only general principles can be discussed, and the National Coal Board would not be prepared to accept strictures on the merits of individual appointments.
PART II.

THE GAS SUPPLY INDUSTRY

The story of gas lighting begins, appropriately enough, with a Scotman. No one now disputes the claim of William Murdoch to have provided the first practical application of gas as a public service and a commercial commodity. It is interesting to note that a descendant, Mr. Charles Murdoch, sits to-day upon the Scottish Gas Board as the member responsible for industrial relations. The history of the Murdoch family—like that of the gas industry—records a subtle change of emphasis over the last century and a half. Although London was the first city to benefit from Murdoch's discovery (the Gaslight and Coke Company was formed in 1812 to manufacture coal gas on a commercial scale for the lighting of Westminster Bridge), Edinburgh was not far in following the lead. The Edinburgh Gas Light Company was formed in 1813, permission having been secured from the Town Council for the laying up of streets to lay pipes. The company was faced with considerable daring and optimism; it began operations before its existence was officially recognised by Act of Parliament. It was not until May 23rd 1813 that an act was passed "for lighting the City and suburbs of Edinburgh, and places adjacent with gas." It was proclaimed that: "Whereas the City and suburbs of Edinburgh, and places adjacent, are large and populous, and it would be of great benefit to the citizens and inhabitants thereof, and to the public at large, if the streets, squares, public passages and places, and houses, shops and manufactories were better lighted; and whereas inflammable air, coal, oil, tar, pitch, asphaltum, amontial liquor, and essential oil may be produced from coal and whereas the said inflammable air being conveyed by means of pipes may be safely and beneficially used for lighting .... the several persons hereinafter named are willing and desirous, at their own costs and charges, to effect the purposes aforesaid." The existence of the Edinburgh Gaslight Company was duly chartered, with a capital of £100,000 and authorised to hold six acres of ground. The works were located at New Street, adjacent to the Waverley Goods Yard, and remained in operation until 1906.

The act also laid down penalties for interfering with the company's works in the execution of the duties. There was a penalty also for "injuring the works (destroy, damage or injure any engine, pipe, plug, or gas or other matter or thing which shall be made, provided or procured for the purpose of this Act)." There was to be a fine of £10, in addition to reparation for the full amount of the damage sustained by such3

This/
CHAPTER I.

History of the Undertaking

The story of gas lighting begins, appropriately enough, with a Scotsman. No one now disputes the claim of William Murdoch to have provided the first practical application of gas as a public service and a commercial commodity. It is interesting to note that a descendant, Mr. Charles Murdoch, sits to-day upon the Scottish Gas Board as the member responsible for industrial relations. The history of the Murdoch family — like that of the Gas industry — records a subtle change of emphasis over the last century and a half!

Although London was the first city to benefit from Murdoch's discovery (the Gaslight and Coke Company was formed in 1812 to manufacture coal gas on a commercial scale for the lighting of Westminster Bridge), Edinburgh was not slow in following the lead. The Edinburgh Gas Light Company was formed in 1816, permission having been secured from the Town Council for the opening up of streets to lay pipes. The company acted with commendable daring and optimism; it began operations before its existence was officially recognised by Act of Parliament. It was not until May 23rd 1818 that an act was passed "for lighting the City and Suburbs of Edinburgh and places adjacent with Gas." It was proclaimed that — "Whereas the City and suburbs of Edinburgh, and places adjacent, are large and populous, and it would be great Benefit to the citizens and inhabitants thereof, and to the public at large, if the Streets, Squares, Public Passages and Places, and Houses, Shops and Manufactures were better lighted; And whereas Inflammable Air, Coke, Oil, Tar, Pitch, Asphaltum, Ammoniacal Liquor, and Essential Oil may be produced from Coal; And whereas the said inflammable air being conveyed by means of pipes may be safely and beneficially used for lighting ... the several persons hereinafter named are willing and desirous, at their own Costs and Charges, to effect the purposes aforesaid." The existence of the Edinburgh Gaslight Company was duly chartered, with a capital of £100,000 and authorised to hold six acres of ground. The works were located at New Street, adjacent to the Waverley Goods Yard, and remained in operation until 1906.

The act also laid down penalties for interrupting the company's workmen in the execution of the duties. There was a penalty also for "injuring the works (destroy, damage or injure any Engine, Pipe, Plug, or Gas or other matter or thing which shall be made, provided or procured for the purposes of this Act)." There was to be a fine of £10 in addition to restitution for the full amount of the damage sustained "by such Hindrance or Interruption."

This/ 58. Geo.III. c. lxvii.
This Act of Parliament, however, imposed no monopoly upon the public of Edinburgh. The Directors of the Edinburgh Gas Light Company tried unsuccessfully to keep competitors out of the field. A petition in 1821 stated: "On the whole the directors humbly think that they have strong claims on the public and Public Authorities to protect them from an opposition, which, if once established, will be most unfair to the existing company, who have hitherto risked their capital so much to the advantage of the Public, will prove ruinous to the competing companies, and most hurtful to the public interests."

Both the public and Public Authority proved deaf to this appeal, and permission was granted to a new company to supply the same area. Although the original intention of this new venture - the Edinburgh and Leith Gas Light Company - was to supply oil gas, it soon abandoned this project and began to distribute coal gas in competition with the Edinburgh Company, laying mains in the same streets as its rival, luring away its customers, and generally indulging in what a later age would declare to be ruinous and uneconomic competition. Then in 1824, a third rival entered the field. 1. This was the Edinburgh Oil Gas Company under the chairmanship of Sir Walter Scott, with works at Tanfield. It was not successful, however, and in 1839 its installations were purchased for £25,000 by the Edinburgh Gas Light Company. This modest amalgamation aroused loud protests from the Edinburgh public, always vigilant against the wiles of monopolists. Another venture, the Edinburgh Portable Gas Company, perished in 1827, after seven years tenuous existence.

Thus the field was left clear for the two remaining companies who continued their cut-throat competition until 1866, when an agreement was made, dividing the area between the two companies, and arriving at a tacit understanding as to the price of gas. But the truce was an uneasy one, and mutual fear kept down the price. The Edinburgh Gas Light Company was in the stronger position, with greater productive capacity, and it made preparations to petition Parliament for powers to build new works, and extend their area. The shareholders, however, were apprehensive that permission to raise more capital/

1. The commercial activities of this period were recalled by Mr. Balfour-Browne, Q.C., in his evidence on behalf of the Edinburgh Gas Company before the Select Committee of the House of Lords on the Edinburgh Gas Bill, Wednesday 23rd March 1887: "The only process of cheapening gas in the interests of the consumer was by getting private companies to compete ... In many of the streets ... two and three sets of mains were existing at the time I am speaking of ... streets were continually broken up for the purpose and when an escape of gas occurred in the street, of course, none of the companies knew from whose main the escape was taking place, and it occurred constantly. The mains were stripped three times to find out an escape of gas, because first one company unstripped the mains, and then finding that the main was not leaking, and that it was some other body's, they covered it up again and left the other companies to find it out."
capital would be granted by Parliament only in conjunction with further clauses restricting monopoly. Against this, the engineer was urging that the New Street works were overcrowded and overworked. The best solution seemed to be to sell out to the Corporation of Edinburgh, and several approaches were made between 1875 and 1886; but the Corporation finally declined to purchase after a sub-committee had reported that the possibility of improved lighting by electricity should be borne in mind. Consequently, in 1887, a Bill was presented to Parliament "to dissolve the Edinburgh Gas Light Company as at present constituted and to repeal their Acts. To reincorporate the Company with further powers, and to authorise the Company reincorporated to purchase additional lands, construct new works and raise additional Capital for the Purposes of their Undertaking." The Bill was opposed by the Corporation of Edinburgh, Leith and Portobello, and by various companies. It was pointed out by Mr. Pender, Q.C., on behalf of Edinburgh Corporation that the company had paid dividends of 10% for many years as well as two bonuses of 30%.

"I think I am justified in beginning with this, that whatever the result of the preamble of this Bill may be, the company is not entitled to any tender consideration - they have had a reasonably good time of it; they have been dividing 10% for a good many years. I do not suggest for a moment that they have done anything illegal. I wish to speak of them with most perfect good humour, but they have had 10% over a very long series of years, and on two occasions, one tolerably remote, but the other very close at hand, they have received back in the shape of bonus 30% of their paid-up capital. Now this is a very remarkable state of things, and a state of things which, I should think, Parliament must rejoice in having an opportunity to put an end to. Certainly the Corporation of Edinburgh does."

Mr. Pender went on to criticise the company for having treated its employees too well. The only reason why its dividend had not been higher, he suggested, was that an extravagant amount had been spent on "management... pensions, and gratuities and one thing and another which all along ever since we have had the opportunity of seeing anything of their accounts has puzzled our experts/

1. The Company wished to contract new works at Portobello. This was opposed by Mr. Clerk, Q.C. (among others), the counsel for Portobello Gas Light Co. His concern seemed to be more for the inhabitants of Portobello than for the commercial interests of his client: "Some of your Lordships know what Portobello is. It is the charming watering place of Edinburgh. It has been pretended here by the promoters of this scheme that Portobello is half a manufacturing town. Why, my Lords, the thing is ridiculous." After pointing out that his company's gas undertaking was only a little, inoffensive one, whereas the projected one would be big and offensive, Mr. Clerk declared: "Keep them away from Portobello why not Granton? I am sure that Your Lordships would not allow a town like Portobello to be sacrificed unnecessarily, merely to save these people from a small expenditure of money."
experts - and also they have managed to keep up this extremely comfortable state of things by keeping out of Committees of Parliament for about forty-seven years ... they have managed to enjoy themselves among their accounts very much like a number of rabbits popping in and out of a warren ... over which the gun of the gamekeeper has never been fired. Whatever happens I think you will probably take care that those extremely pleasant days are over."

Mr. Pender later returned to his attack upon the wages paid by the Company, which were higher than wages paid in Glasgow. "You cannot help the prices of coke and coal ... I cannot force you to sell your residual products for more than you can get for them ... but make your wages go as far as else-where." This point was neatly refuted by Mr. Balfour-Browne, Q.C., for the company. One of the reasons for the Bill had been that the works were becoming uneconomic, and it was precisely this factor which was forcing up wage costs.

"If you have crowded works there must be more labour. The works are so crowded that they have to put in coals on a Sunday - this means extra work and extra wages ... The criticisms have come from people who have not seen the works. Gas engineers like Mr. Woodall and Mr. Livesy have seen nothing in management or working expenses which is excessive." Mr. Pender had, of course, been confusing wage rates with earnings.

The counsel for Edinburgh Corporation summed up the case in the following words:-

"A company constituted as this is, with such a free hand as this company has had up to now, if it is to exist any longer, should be put under the most stringent statutory control ... but on the other hand, it is still more advisable that the supply of gas should as is the case elsewhere being done daily now, go into the hands of the Corporation themselves." Negotiations to this end, Mr. Pender stated, were in fact going on.

Edinburgh Corporation thus wished to exercise the power that the company sought, but in their case to run the undertaking as a non-profit-making concern. As the freely elected representatives of the public they were best suited to look after the public's interests, and monopolies such as the one proposed by the Gas Company were better left in public rather than private hands. The Corporation's objections prevailed, and the bill was rejected. In 1888 the Edinburgh Gas Light Company and the Edinburgh and Leith Gas Light Company were acquired by the municipalities of Edinburgh and Leith, and the Edinburgh and Leith Gas Commissioners were incorporated by Act of Parliament to carry on the undertakings for the whole area. The Companies had a total share/1.

share capital of £350,000 and in addition had issued £20,000 in debentures, and their capitalized value, when taken over, was nearly £1,000,000. In spite of many vicissitudes, the private companies had not done so badly.

The act provided for the election by Edinburgh and Leith Corporation of fifteen and six of their members respectively to the Gas Commission under the Chairmanship of the Lord Provost of Edinburgh. In addition to their powers to supply exclusively the districts of Edinburgh and Leith, they were empowered to buy up any neighbouring undertakings and to supply gas to any area outside Edinburgh not already served by a gas undertaking. At the time of the transfer there were two manufacturing stations, one at New Street, Edinburgh, and the other at Baltic Street, Leith, with an engineer in charge of each. Both these works were enlarged. In 1896 the Edinburgh works were equipped with mechanical stokers driven by hydraulic power, coal breaking and elevating machinery, as well as carburetted water gas plant. Although these improvements considerably eased working conditions and increased production, further development was impeded by shortage of space. The Portobello Gas Light Company was absorbed by the Commission in 1896, adding £24,000 to the capital account. This company's works were closed down, and a high pressure main laid from Edinburgh to Portobello, the supply of gas being maintained by coupling this up to the existing mains with controlling governors.

The decision to supply the city with water gas had only been taken after prolonged public controversy. The newspapers carried letters complaining that the carbon monoxide content of the city's gas would be increased. The Commissioners had at last appointed Professor Brown of the University of Edinburgh to enquire into the allegations. His terms of reference were "to advise as to the degree of risk of poisoning incurred by the public by the use of Carburetted Water Gas as against ordinary coal gas," and upon the Professor's assurances that these fears were exaggerated, the Commission went ahead with its plans.

In 1897 the Commissioners appointed Mr. Walter Ralph Herring as Engineer and Manager in charge of the whole undertaking. His first duty was to investigate the condition of the gas production plant and report upon the advisability of constructing new works in the city, in view of the congested state of the old manufacturing stations. Herring's report, made in conjunction with a Mr. George Livesy, submitted in September 1897, made it clear that with an annual increase of 3½% in the city's demand for gas, maximum daily consumption was outstripping maximum daily manufacture. In spite of the construction of the new Carburetted Water plant, the limitation of Carburetted water gas mix to 20% would leave the problem unsolved. A further problem was the supply of coal; the available room for/
for coal storage was only equivalent to fifteen days manufacture. With the existing undertakings, the price of gas was being kept down by the restriction of gas sales, whereas under economic manufacturing conditions the price of gas should diminish as consumption increases. Herring's report was accepted and an alternative site was considered. Upon this new site all manufacturing operations would be concentrated. The area required should be sufficient to serve present and probable future needs, estimated by Herring to increase annually by 3½%. Traffic facilities for the import of raw material and the export of products were considered to be of primary importance in selecting a site for the purposes in view. Hitherto, coal had been supplied exclusively by the North British Railway system. Herring considered it of supreme importance that any new site should be adjacent to both the North British and Caledonian Railway system, so as to enable the Gas undertaking to benefit from competition between the two railways. Being also near the seaboard of the Firth of Forth, an easy access to water-borne traffic would also be advantageous. In view of the efforts of the Gas industry to secure a monopoly in the Edinburgh area, Herring's efforts to ensure competition among other stages of production seem a trifle ungracious! Two available areas received final consideration, one at Craigentinny and the other at Granton. Having ascertained that the Duke of Buccleuch would be prepared to sell the site at West Granton for £124,000, together with concessions such as the exclusive use of a private railway between Granton Harbour and the Works, and the right to tip refuse upon the foreshore, the Commissioners selected the Granton site. The site was three miles from the city centre, and occupied an area of 106½ acres, in addition to 4½ acres on the foreshore. Operations were started on the first section of the works on 4th October 1898, and the foundation stone was laid on 16th October 1899. Gas manufacture started on 11th October 1902, and the works were formally opened on 27th February 1903. Operations on the second section on 4th November 1903, and the works formally opened on 15th October, 1906.

"The abandonment of manufacturing stations supplying a population of nearly half a million people," wrote Herring in 1907, "and the construction of entirely new works elsewhere, naturally suggests circumstances out of the common ... the questions involved threatened to impose upon the gas consumers a serious financial burden ... The price of 25-candle gas at the time was 3/- per 1,000 cubic feet; and the cost of gas-making materials and labour were then as low as commercial conditions were likely ever to permit them to be. At the outset, it therefore appeared as though the burden of the cost of new works would have to be borne by the gas consumers. On the other hand ... new works, equipped with modern/
modern plant and appliances on an area of land sufficient to allow of the scientific handling of the material employed, must inevitably yield economy in the cost of manufacture. At the same time it was predicted that this economy would be at least sufficient to pay the interest and sinking fund charges on the capital outlay, without increasing the price of gas, or calling for assistance from the ratepayers."

Herring's predictions, as he justifiably pointed out, proved correct. By 1907, the Commissioners "were able to pay all interest and sinking fund upon the capital outlay on works and land, as well as the increase of capital due to mains extension, meters, stoves, etc., amounting in all to £930,213; also to reduce the price of gas by 3d per thousand cubic feet lower than it had ever been in the history of the undertaking - a reduction representing a saving of £23,500 per annum to the gas consumers."

The total cost of the new works, including land, was £842,000. By 1920 (the year in which the Gas Commission was dissolved) the total expenditure (revised by the capital account) including the purchase price of various undertakings acquired, amounted to £2,509,620. Of this amount £1,494,573 had been repaid, leaving an outstanding capital debt of £1,015,047. The capital represented by the old works had been extinguished.

Many tributes have been paid to Walter Ralph Herring as a great engineer. Experts from all over the world were frequent visitors at Granton, and Herring's advice was in constant demand. It should be recorded that he was an equally far sighted businessman, and one might almost say, a merchant adventurer. His consideration of various courses of action ranged far beyond the purely technical; his ruthless determination to "rationalise" Edinburgh's gas manufacture and supply did not preclude him from assessing all the benefits arising from competition in the wider economic field. As an administrator, his virtues were hailed by the "Scotsman" in 1906: "... although the statistics of working are shown in large figures, the economies which have been brought about are founded on small details of management, and have been achieved as a result of close and painstaking attention to every section of the works." Herring's preoccupation with details did not obscure his vision of the future. When everyone was worrying about the supplies of gas to tide over the winter of 1898, Herring was working out a policy for the next fifty years, "a policy of evolution (which) could be embarked on in stages depending on the economic position and demand for gas." The extent to which his policy has been vindicated can be judged from a report made in 1951 by the Edinburgh Undertaking to the Scottish Gas Board. It recorded that there was no need to "contemplate an additional works until the/
the margin for extension on the existing works area at Granton has been completely taken up."

In a decade when the technician, the administrator and the accountant are kept strictly in separate compartments we can surely salute the memory of Walter Herring - a Napoleon in all three fields.

The Gas Commission continued in existence until 1920, when the Edinburgh Boundaries Extension and Tramways Act transferred the functions of the Commission to the Edinburgh Corporation. The gas undertaking was administered by the Corporation Gas Committee, consisting of Convener, Vice-Convener, and fourteen members, and later by the Gas Sub-Committee of the Public Utilities Committee. On 3rd February 1948, the Public Utilities Committee declared that "this committee is opposed to the nationalisation of the Gas Industry as it will not promote the efficient supply of gas throughout the country, and will result in the increase of the cost of gas." The Committee recommended that representations should be made against the Gas Bill prior to the second reading.

An amendment stating that "this committee should accept the inevitability of the principle of the nationalisation of the gas industry" was defeated by ten votes to seven. The original motion was subsequently passed by the Town Council. Various reasons were given, during the debate, for Edinburgh's opposition to the Bill. Apart from those alleging inadequate compensation, it was variously stated that "no valid reasons have been put forward for the nationalisation of the Gas Industry"; "the effects of the Bill will be contrary to public interest"; "it seeks to set up a cumbersome administrative machine with an army of unnecessary and expensive bureaucrats"; "the organisation which the Bill proposes to set up will not give efficient service to the public."

The Town Council declared that if the Government were to proceed with the Bill, amendments should be put forward "to remedy its worst features." The most unequivocal of these amendments was one stating that "the Bill shall not apply to Scotland."

In spite of Edinburgh's protestations its undertaking passed into public ownership on 1st May 1949. It was acquired by the new Scottish Gas Board, and became part of the Edinburgh and South East Division of the Board.

The new structure of the gas industry - of which the Edinburgh undertaking became a part - differed from that of the other fuel industries which had passed under public ownership in the degree of decentralisation, laid down in the nationalisation act. The emphasis in the gas industry was upon the twelve area boards which were severally responsible to the Minister for the conduct of their business/
business, and were therefore given powers necessary for that purpose. The first duty with which the area boards were charged was to develop and maintain an efficient, co-ordinated and economical system of gas supply for their areas and to satisfy, as far as it was economical to do so, all reasonable demands for gas within their area. Their second and third duties were similar - to develop the efficient production of coke and to develop efficient methods of recovering by-products. ¹

The Areas differed greatly in size, from Scotland with its 30,400 square miles to the North Tames with 1,059, and even more strikingly in economic and physical characteristics. Equally significant were the differences in density of population. In Scotland the average is 170 to the square mile; in the North Thames Area the average is 5,393. Moreover, these average figures conceal wide differences within the Areas themselves. Associated with these variations in natural features and population were wide differences in the size and distribution of the undertakings which vested in the Boards and which could be chosen as focal points in their organisation. The result was that there was no common formula for the kind or number of divisions and sub-divisions of an Area or for the size of its headquarters, and each has adopted the pattern deemed most appropriate to its circumstances. All the Areas, however, stressed their intention of decentralising as much as possible by delegating executive authority to local managers.

Each Area Gas Board consists of a chairman, deputy chairman, one or two full-time members, and not more than seven part-time members including the Chairman of the Regional Consultative Council. The Scottish Gas Board consists of a Chairman, Deputy Chairman, two full-time members (one of which exercised a special responsibility for Industrial Relations) and four part-time members (including the Chairman of the Consultative Council). The Headquarters staff in Scotland consists of the following officers; Secretary, Chief Financial Officer, Commercial and Sales Officer, Principal Legal Officer, Principal Administrative Officer (Establishments), Deputy Financial Officer and two Assistant Financial Officers. The constitution of headquarters staff lends colour to the allegation by gas undertaking managers that it is difficult to find a gas engineer at Randolph Crescent (the offices of the Board). It is true that the presence of engineers is required more at lower formation, but the psychological effects of concentrating lawyers and accountants at the highest level (however administratively desirable) cannot be discounted. With regard to/

¹ Gas Act, 1948. 11 & 12. Geo.VI. c.67. Section I(1)
to the Scottish Area Board members, the Chairman is a retired Civil Servant and an ex-Governor of Assam; the deputy chairman is an accountant with previous experience of the gas industry. Of the full-time members one is a gas engineer, and among the part-time members there are two persons with professional gas qualifications.

In 1949, the Scottish Gas Board set up five divisions; Edinburgh, South East, Central, Northern, Glasgow, and South Western. In 1950, however, the Edinburgh and South East Division was divided, forming two divisions (the Edinburgh Division and the South East Division), each under a divisional controller. The undertakings now in the Edinburgh Division are Edinburgh, Broxburn, Loanhead, Musselburgh, Penicuik, Prestonpans, Tranent, Dalkeith, Gorebridge, Lasswade, Newtongrange, Arniston, and Rosewell. The manufacture of gas at five of these undertakings has either been, or is in, the process of being discontinued, and they are to be linked and merged with Edinburgh.

The pattern of organisation in the gas industry differs not only between areas (the Wales Gas Board, for instance, has no divisions but employs a system whereby the managers of adjoining undertakings are made members of Group Committees which choose their own chairman) but it also differs between divisions in the same area. This is best illustrated by comparing the Edinburgh Division with Central Division. In the Central Division of Scotland there are three groups (Dundee, Perth and Fife) and these groups are further divided into sub-groups. Thus between the Divisional and undertaking levels are interposed two levels of control; the Group Manager and the Sub-Group Manager. This pattern of organisation is necessary because of the scattered nature of the undertakings.

In the Edinburgh Division there are no intermediaries between the Divisional Controller (Mr. D. Beavis, M.Inst.Gas.E.) and the managers of the various undertakings. Because of the size and importance of the Granton works (which will soon be serving most of the division), Mr. Beavis keeps a close personal supervision of this undertaking. He thus exercises what is virtually a dual responsibility; Controller of the whole division and Undertaking Manager at Granton (although there is a manager - now designated Works Superintendent - at this gasworks.) The creation of groups and sub-groups in the Edinburgh Division has been recognised as unnecessary. For a few months after nationalisation there was an Edinburgh Group under the Edinburgh and South East Division, but with the creation/

1. Since this was written the two part-time members with gas engineering experience and qualifications (Mr. J. Campbell, M.B.E., M.Inst.Gas.E. and Mr. D. Fulton, M.Inst.Gas.E.) have retired and three new part-time members have been appointed in their place increasing the number of part-time members to five. None of these three new members possess gas engineering qualifications. Two are businessmen; the third, Lord Mathers, is an ex-M.P., Chairman of the Regional Hospital Board and former Lord High Commissioner for Scotland.
creation of two new divisions in the place of one the Group formation was abolished, and Edinburgh, as stated, comes directly under the Divisional Controller.

Members of the Scottish Board, however, meet managers directly from time to time in the different localities, with the avowed object of ensuring that local conditions are taken into account in considering the problems and practice of the industry, and also of ensuring that no manager's experience is lost and that managers are, as far as possible, kept in touch with the wider sphere of policy and administration. Certain Board members also meet each divisional controller and group manager at regular intervals, and at these meetings matters relating to local administration and development are considered. Minutes of the meetings with details of the decisions given by the Board members on items within their delegated powers, and their recommendations on other items are submitted thereafter to a meeting of the complete Board (which takes place twice monthly). There is an arrangement whereby an Executive Committee of the Board meets to consider matters of urgency when necessary and to examine other questions in greater detail. These meetings are held regularly between Board meetings and at such other times as may be necessary. The Executive Committee consists of such members of the Board as can attend provided there are present not less than three, including the Chairman, Deputy Chairman, and their decisions and recommendations are submitted to the next meeting of the Board.

Notwithstanding the autonomy of Area Boards in the gas industry, Parliament saw the need for a central body to represent the industry as a national whole, to assist Area Boards, and to be responsible for matters that cannot be confined to any one area. Such is the function of the Gas Council, which formally appointed by a minute signed by the Minister of Fuel and Power on 25th November 1948. This Council is composed of the Chairman of the twelve Area Boards together with a full-time Chairman and Deputy-Chairman. The duties of the Council, as laid down in the Act, are of two kinds, general and specific. Its general duties which underline the fundamental conception of the council as the central, advisory, promotional and co-ordinating body of the industry are (Section 2(l)):

"(a) to advise the Minister on questions affecting the gas industry and matters relating thereto; and
(b) to promote and assist the efficient exercise and performance by Area Boards of their function."

Thus:

1. The Deputy Chairman (Mr. D.D. Burns, A.B.C.A.A.) makes himself responsible for the West of Scotland, and a full-time Board member (Mr. D.D. Melvin, M.Inst. Gas.E) for the East. The other full-time Board member (Mr. C. MacRae, C.E.E. D.L. J.P.) is responsible for Labour Relations & Establishment matters. Part-time members are allocated geographical areas for their special attention.
Thus the Gas Council stands in dual relationship, to the Minister on the one hand and the Area Boards on the other. The specific duties which are placed upon the council, and which flow as a natural consequence from the general duties indicated above, relate mainly to finance, labour relations and research. With regard to finance, the Council is charged with responsibility for the capital transactions of the industry as a whole. In labour relations, it is the responsibility of the Council to consult with employees' organisations to establish conciliation machinery; and Area Boards must comply with agreements made by the Gas Council. It is also the duty of the Council to co-ordinate the Area Boards' programmes for the training and education of their employees and to settle with the Minister a general programme for the advancement of the skill of persons employed in the industry.

As the benefits of research accrue to the industry as a whole, it is the Council's responsibility to settle with the Minister from time to time a general programme of research and to see that it is carried out, either by itself or by some other body, including an Area Board, acting on its behalf. If an Area Board wishes to conduct research into such matters affecting its functions as are not included in the general programme, it must first consult the Gas Council.

Such was the organisation of the gas industry at the national, area, divisional and undertaking levels from 1st May 1949 onwards. Compared with the coal and electricity industries the measure of devolution permitted is striking. But it must be remembered that, viewed from the lowest operational level, e.g., that of the Edinburgh undertaking, the movement was in one direction only away from local control. As far as the undertaking manager is concerned the diminution of authority has been even greater in practice than in theory. Although the Gas Manager was formerly subject to the orders of the Gas Commission and later the Corporation Gas Committee and Sub-Committee, in practice exercised the initiative in most matters. Committee decisions were frequently mere endorsements of what the manager decided should be done. The lack of technically qualified men among the manager's superiors meant that it was often easy for him to secure authority for his plans and actions. Under nationalisation an elaborate hierarchy of equally qualified men stretches above the manager of an undertaking, submitting his recommendation and activities for scrutiny. It is true that the job is now narrower in scope, and bears little relation to the position held by Walter Herring fifty years ago or by any of his successors down to 1949. But the draining of authority away from the undertaking level in the/

2. Ibid.
3. Ibid.
the last four years, as in the other industries which have been examined, has militated against increasing workers' participation and control at that level where it can best be exercised.

As far as promotion opportunities were concerned, however, nationalisation opened up new vistas for many Edinburgh Undertaking employees. The most important example was that of the last of Walter Herring's successors, Mr. D.D. Melvin, M.Inst.Gas.E., who was in charge of the Edinburgh Gas Undertaking until Vesting Day. When his undertaking passed under public ownership he was appointed a member of the Scottish Gas Board, a position he has held ever since. What is a gain to the individual may not, however, be a gain to the industry. In the early days of an undertaking like Edinburgh direct operational control of such works represented the peak of a man's ambition; his job only began when he assumed the position, and from that time onwards the approval and prestige which he won depended upon the progress of the undertaking. Control of an undertaking like Edinburgh since 1949 has merely been a stepping stone; there is much more prestige in securing appointment to a higher formation (or even to membership of an Area Board) than in staying at the head of an undertaking, however successfully one runs it. Indeed the reward for running an undertaking well is to be taken away from it. Whatever the merits of central planning and research in the gas industry - and they are considerable - management at the undertaking level must never be allowed to degenerate into a second rate job, to be vacated at the earliest opportunity. It is vital from a technical point of view - as well as from the standpoint of good industrial relations - that the position of the manager should be strengthened in relation to the organisational hierarchy. This is not merely a matter of affording greater powers, but also of enhancing the prestige of these men. There must be a reversal of the idea (which according to some managers is gaining ground in the gas industry) that the further one moves away from the gasworks the more prestige and power one enjoys.

It was inevitable that this chapter should have started as the history of a single undertaking and end as the history of the Scottish Gas Board. That the transition carried with it any advantages will be demonstrated in later chapters. But it has been impossible to move among employees in the industry during the three years since nationalisation, without being aware of the dangers inherent in the transition.

Note/1. The Undertaking Manager may not spend more than £100 without the consent of the Divisional Controller. The Divisional Controller may not spend more than £2,000 without the consent of the Scottish Area Board. For any project estimate to cost £500,000 or more the Area Board must secure permission from the Gas Council. "A general programme of work involving substantial outlay on capital" (under Section 1(5) of the Gas Act) requires the approval of the Minister of Fuel and Power.
Note on Personnel Organisation in the Gas Industry since Nationalisation

The Gas Council

The Council as we have seen has three broad statutory responsibilities; to advise the Minister on questions affecting the gas industry; to assist the Area Boards to carry out their duties; and to perform services for the Area boards if authorised by some or all of them to do so. In addition, however, it is charged with certain specific duties concerned with personnel. These include matters concerned with the national negotiating and consultative machinery and the coordination of training.

The headquarters staff includes an Industrial Relations Officer who is responsible for all relations with trade unions, including conciliation matters. In addition the Council has established an Industrial Relations Committee, consisting of two representatives from each area board together with the Deputy Chairman of the Council as Chairman, to advise the Council on industrial relations. This Committee frequently acts as the central negotiating body with the trade unions, "feeding" the representatives on the national negotiating machinery. The secretary of this Committee is a full-time official on the headquarters staff.

Area Boards

The Area Boards differ from the coal and electricity organisation in that each board is fully independent, and has developed its structure as it thought fit. Most boards, however, have divided their areas into primary units which are variously called divisions, groups or districts. Some have made further partition into sub-divisions, groups or districts. As there is no standard nomenclature it means that a group is equal to a sub-division in some areas and to a division in others.

Scotland is in advance of most areas insofar as it has a full-time Board member (Mr. Charles Murdoch, C.B.E.) responsible for industrial relations. In most other areas there is no special responsibility for these matters at Board level; responsibility begins at the senior officer level.

The Scottish Board member is assisted by a full-time Industrial Relations Officer. The duties of this officer are concerned with pay and conditions, recruitment and records of salaried staff. He owes direct responsibility to the Secretary.

The Scottish Board Member is assisted by a Principal Administrative Officer (Mr. G. Muir Murray, ex-Secretary of a Gas Employers Association) who is concerned with Industrial Relations and Establishments. In the first capacity this/
this officer deals with negotiations, consultation, claims and recruitment, and welfare; secondly with pay, conditions, recruitment and records of salaried staff. Towards the end of 1952 an assistant was allotted to this officer, to relieve him of duties in connection with Education and Training. (The man appointed to this post was Mr. Evan Leslie Adams, B.A., an ex-Miner and holder of a miners' scholarship to Ruskin College. Mr. Adams had held various appointments with the Ministry of Fuel and Power and the National Coal Board before entering the employment of the Scottish Gas Board).

Below Board level in Scotland there are no officers employed full-time on any aspect of industrial relations. Thus, the personnel department for Scotland virtually consists of these two officers. This is in striking contrast to some English Areas. The North Thames Gas Board, for instance, employs a Staff Controller as head of its personnel department. He is assisted by an Establishment Officer, a Labour Relations Officer, a Training and Education Officer, and a Welfare Secretary; in addition there is a Labour Officer in every Division and a Welfare Officer in every Group. The Eastern Gas Board employs personnel officers in its larger divisions. In its Tottenham division the personnel officer is assisted by an education officer and an officer in charge of training.

On 10th September 1898, the stokers at the New Cumnock power station, Strathclyde, went on strike in protest against their treatment or lack of it. The stokers were operating a 500-ton steam boiler which supplied the power station with electricity, and they were alleged to be underpayment. They complained of the poor working conditions and low pay, and demanded an increase in wages. The strike lasted for several days until the management agreed to their demands. The stokers returned to work and the power station resumed normal operations.
CHAPTER II.

Environmental Working Conditions.

The nature of the operations performed by workers in the gas industry is less familiar to the general public than the more dramatic role of the coal miner, and it will be necessary to describe in some detail the technical processes involved in the manufacture of gas.

The basic operation in Gas making (the development of which over the last century has effected a tremendous improvement in working conditions) is the distilling of bituminous coal in a closed retort, whence the crude gas bubbles into a hydraulic main, is drawn by an exhauster or pump through a series of condensers, washers and scrubbers, to remove the tarry and aqueous contents, and finally through a purifier, where the sulphurous elements are removed, to the gas holder. The weight of the holder drives the gas, at a pressure regulated by the station governor, through the distribution system of mains and pipes to any point where it is required. The earliest retorts had been simply large cast-iron pots, in which the coal was directly heated over a coal or coke fire; to empty the coke residue after carbonisation, the retorts had to be hoisted by crane and inverted. These gave way to horizontal retorts, which were cast-iron cylinders six feet in length and one foot in diameter, set in banks over a coke fire. Little use was made of by-products aqueous and tarry products being regarded merely as useless residuals. The retorts were charged, with considerable physical effort and in conditions of extreme heat, by using a large coal scoop. Coke was removed, at the completion of the process, by raking. This method of direct firing was, however, wasteful and was replaced by regenerative firing, i.e., the retort banks were heated by the combustion of producer gas generated by passing air through red-hot coke. The use of cast-iron in the making of retorts gave way to fireclay which could be heated to more effective temperatures. Human energy was still the dominant factor; the use of fireclay instead of cast-iron permitted retorts to be made much longer, and twenty-feet "through" retorts replaced the old six feet cast-iron retorts which had been closed at one end. Stoking was carried on by six men, three working on a scoop ten feet long from each end of the retort. These men were performing this task for twelve hours daily.

On 29th September 1888, the stokers at the New Street works, Edinburgh, protested against their conditions of work by sending a delegation to the Commissioners. They complained of the excessive heat in which they worked, and alleged that operating upon four ovens (of eight retorts each) was taxing them beyond/
beyond endurance. They wished to reduce the number of ovens worked to three. They also alleged that supplies of coal were overwhelming them, and they wished the flow of coal to be weighed. The Commissioners averted a strike by conceding improved conditions.

In 1896, the New Street works were equipped with mechanical stokers, and coal breaking and elevating machinery. Using mobile power-driven machinery, one man could ram the coke out of the retort and lay a fresh charge. A carburetted water gas plant was introduced into the Edinburgh works at the same time. The use of carburetted water gas maintained the illuminating power standard of the increased gas production at a level conforming with legal requirements. Water gas was produced by blowing steam through red hot coke; it was then injected into the coal-gas stream. The congested condition of the New Street works acted as an incentive to the introduction of water gas plant, which occupies very little space in proportion to output. Whereas a retort might require several days to be brought into operation, carburetted water gas could be produced to meet sudden demand, in a matter of hours. Furthermore, the process was less dependent upon coal supplies, a particular advantage during this period, when coal prices were rising.

At the time when Walter Herring was drawing up his plans for the new works at Granton, the problem of devising more efficient and easily-handled retorts was being debated by gas-engineers throughout the country. More than ten years before, a retort had been tried which was inclined to the horizontal at about 32 degrees. This reduced the physical effort involved in charging and discharging retorts. Other engineers were experimenting with a vertical retort whereby the law of gravity, rather than the sweat and toil of stokers, would carry out the operations of charging and discharging. William Murdoch had experimented along these lines, but he was defeated by the swelling of coal during carbonisation, and by difficulties of heating. Although these problems were later solved (e.g., through regenerative rather than direct firing) the advantages of vertical retorts did not seem unqualified. Against the economies of ground space and consumption of fuel, and the abolition of complicated stoking machinery, the gas undertaking had to set the higher capital cost. Repairs were more complicated to carry out during operations, and coke was liable to jam in the retorts. Where a higher grade of coke was required for industrial purposes, the vertical retort might not be as satisfactory as the horizontal.

In 1897 this controversy was by no means resolved, and Herring's decision to adopt inclined-retorts was keenly debated both among his immediate circle, and/
and in the gas engineering world as a whole. "The equipment of a works of such a character on so large a scale was a problem that required the most mature consideration; and about this time - 1897 - the minds of gas engineers were much exercised regarding equipment - in fact it may be said that the gas profession had then arrived at a parting of the ways. The old order was giving way to the new. But while old systems and methods were established by tradition, new ideas had yet to be proved efficacious. Mechanical appliances such as now exist in a modern works were comparatively novel ... The best method of carbonizing coal was a matter of keen controversy; and there were not a few who looked askance at the proposal to equip such a large works wholly on the inclined-retort system...

The concentration of so large a unit of manufacturing plant in one section was also a matter of mature consideration; but experience shows such concentration to be no disadvantage. It has contributed to economy both in construction and, to some extent, in the cost of manufacture. The assembling in one block of buildings of the whole retort-house plant, condenser-house, exhauster-house, the machinery for driving the entire coke and coal handling plant, and the workmen's messrooms and lavatories, is constructionally economical, and of great convenience and comfort in carrying on the operations." 1.

Herring goes on to reject the notion that the introduction of mechanical equipment leads to undue expenditure in the costs of repair and maintenance. The space which he devotes to this argument is a reminder that the Gas Commission of 1899 needed considerably more convincing upon the merits of expenditure than the Gas Board of 1952.

Herring's plans for the new works at Granton ushered in a new era. His object "at the outset was to build a works wherein manual labour was reduced to a minimum ... brains rather than muscle were to be the controlling factors of the undertaking; and therefore labour-saving devices were introduced to an extent not hitherto attempted." We know our Herring well enough by now, however, to look for shrewd and practical motives. We find them elsewhere in his report: he is planning "not only to relieve the operatives from the arduous operations ordinarily associated with the manufacture of gas, but also to reduce the cost of production." Wherever possible in Granton, machinery was to replace the shovel and barrow. Stoking machinery was already in fairly general use, but the gas industry was lagging in the introduction of scientific handling of raw material and its resulting solid products, from the tipping of the coal-waggon to the loading and despatch of the coke. At Granton "the fundamental object aimed at was that the succession of waggons bringing coal into the works should be/

be emptied of their contents, and passed forward to be refilled with the coke yielded from the coal that had been delivered but a short time before. In this way, the traffic on the works would be operated in cycles - incoming coal traffic in no way impeding outgoing products." Brains rather than muscle did indeed become the controlling factor at Granton; coal was shunted by the Gas Commission's own locomotives, hauled into position by hydraulic capstans, the wagons tipped by hydraulic rams and elevated to the overhead coal bunkers by bucket elevators. Herring regarded the installation of inclined-retorts as his greatest triumph, especially in view of the hostility shown in the professional journals to this new method. Not only did they yield more gas than was formerly obtained from the same mixture of coal, but this high yield was obtained at a greatly reduced cost per ton of material handled, while easing the workers of the tremendous physical effort involved in operating the old horizontal retorts.

The attitude of the workers to the various labour-saving devices, including the new inclined-retorts, was one of suspicion and even downright hostility. Such damage was done to the retort-settings, in the months following the opening of Granton, that Herring observed: "... Injury was done to the settings in the first instance as a consequence of, in some cases, a want of proper knowledge and regulation on the part of those in charge, who were all strange to the system, and also, I am sorry to say, in some cases as a consequence of deliberate intent on the part of dissatisfied operatives, which at the outset gave us very considerable trouble."

Six months after the Granton works had been put into operation, Herring decided to close the works down for reorganisation and review. This decision evoked considerable criticism among the citizens of Edinburgh (apprehensive that good public money had been wasted upon this vast new undertaking), and Herring asked the Commissioners to appoint a Special Committee to visit the works. The duty of the committee, appointed in March 1903, was to examine the validity of "various rumours which are afloat with regard to the condition of Granton works." Herring, in his evidence, pointed out that "malicious statements are not uncommon where new and improved processes are introduced to supplant muscles for brains, and are easily traceable as a rule to a few displaced or discharged workmen of a type that are usually a disgrace to their class; and their comments are in this case, as in all others, unworthy of credence."

Herring's reason for the close-down (which was intended to afford a complete and thorough examination of every part of the apparatus) was to enable the foremen and leading hands to understand and examine the nature of the operations/
operations upon which they were engaged. All these men had been transferred from the old works, and they were required to operate a completely new type of plant. But Herring also made it clear in his statement to the Commissioners that there was another question of greater importance to the concern commercially. This was the need for the dismissal of numbers of the operatives from the old works.

"The men had made a dead set against the plant, and were determined to acquire such favourable conditions of labour as to make labour-saving devices an absurdity. Some were sullen in disposition, and endeavoured by every possible means in their power, both deliberately and otherwise, to cause damage to the plant and appliances during the first season's work." Herring's grievance seemed to be that the relative security of employment afforded by public authorities had been too scrupulously observed by the Gas Commission, and that all the employees at the old works had been automatically transferred to similar jobs.

"The men, used to the old customs, could see no virtues in the new, and were prepared to go to any extremity to prove their opinions to be correct. Needless to say, my view did not agree with theirs, and for some time it was somewhat difficult to get anything like fair and just work performed." The operation of closing the works for a short period of spring cleaning "permitted of a cleaning up of both the plant and the operatives; the latter not being the least necessity."

Statistics for the first period of working at the Granton works during the winter of 1903-1904 bear out Herring's defence of the inclined-retort installations, although their margin of superiority at this early date was only slight. The make of gas in this period averaged 10,151 cubic feet per ton of coal carbonised, as compared with the average for the preceding three years at the old works of 10,147 cubic feet per ton.

The Special Committee, which began its investigation on 27th March 1903, visited the old works before proceeding to Granton. They examined retort-settings in various stages of use. The relevant minute of the Edinburgh and Leith Gas Commission reports unequivocally that "they expressed their entire satisfaction with everything."

Herring's inclined-retorts continued to be used until the introduction of vertical retorts, which began in 1926. The impetus for this change was largely the Gas (Standard of Calorific Power) Act, 1916, followed by the Gas Regulation Act of 1920. Hitherto, the old statutory requirements of illuminating power had still been enforced. Under the stimulus of the Great War, 1914-1918, there was/
was a demand for the increase in the production of benzol and toluol, for use in explosives manufacture. To secure the highest possible yield of these products by "stripping" the gas, the illuminating power had to be allowed to fall. The Government decided to abandon the illuminating standard, and in the act of 1916, undertakings were allowed to substitute for their illuminating standard a calorific power standard of 500 British Thermal Units per cubic foot. The Fuel Research Board in 1919 pointed out that electricity would be competing in light and power production, but that the gas industry ought to remain supreme in the distribution of potential heat energy. The Gas Act of 1920, under which gas was to be sold on the basis of heat content instead of by volume, was the outcome of this report. Undertakings were now given the freedom to declare a calorific power appropriate to individual technical conditions.

The unit of charge adopted was the therm (100,000 British Thermal Units, one British Thermal Unit being the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit).

The abandonment of illuminating standards, and freedom in the choice of calorific value, stimulated the introduction of the vertical retort. The technical reason for this was that vertical retorts permit the injection of steam at the base, thereby increasing the gas yield per ton of coal carbonised. Technical improvements have overcome the problem which baffled Murdoch - the swelling of coal during carbonisation.

In 1924 the Edinburgh Town Council approved of a scheme for the installation of vertical retorts, after a sub-committee had visited the leading gasworks in Scotland and England. Eighty-eight retorts were installed, each capable of carbonising 8½ tons of coal per 24 hours, a total of 748 tons per day. Mechanical Coal Breakers, Elevators and Conveyors performed the most arduous of the tasks; after being broken, the coal was elevated about eighty feet, and transferred to conveyors which fed the coal to the retorts. The coal then descended by gravity through the retorts, at a speed automatically governed by the rate at which the coke was extracted at the bottom. Various gases and volatile products were formed as the coal reached the required temperatures, and ascended to the top of the retort where they were taken off. Special insulating bricks, coated on the outside by special non-conducting material, minimised the heat. This vertical-retort installation is still in operation at Granton. We may note that although Herring was victorious in the polemic warfare which raged so strongly at the time of Granton's erection, scientific progress eventually overtook him, and inclined retorts are to-day generally regarded as obsolete. This does/
does not alter the fact, however, that the Granton works between 1906 and 1924 was ahead of most other undertakings in the country in terms of efficiency and mechanisation, and the prompt transfer to vertical retorts after the Gas Regulation Act kept it abreast of other undertakings.

The problem of how much work could be performed by the retort-house operatives (stokers and labourers) was never solved by Mr. Herring, nor by Mr. Alexander Masterton (who succeeded him in 1910) and it is a complaint of the present Works Superintendant at Granton, Mr. J.P. Scott, that stokers are not as fully employed as they might be. Herring was faced by the refusal of workers to operate more retorts under the improved mechanical conditions at Granton than they had operated at the old works, and this problem had to be attacked (as already described) by a temporary close-down of the works and the hiring of new men. In 1912, when workers in various categories were petitioning for wage increases, Mr. Masterton thought that the opportunity could be seized to exact more work from the stokers, by making an increase in pay conditional upon their agreeing to operate 94 retorts instead of 84. Mr. Masterton's contention was that, even taking into account time spent sweeping up and maintaining the retorts, the men worked only four hours out of the 8 hours on duty. "We do not know a Gasworks in the country", Mr. Masterton told the Commissioners, "where the men have so little actual manual labour during their eight hours shift as at Granton."

The men had other views. At a meeting in the Station Buildings, Granton, on 16th December 1912, at 11 a.m., a deputation of nine workers met Mr. Masterton, Mr. Jamieson (Chief Clerk) and the General Foreman. The minutes of the Gas Commissioners record the following:

Mr. Masterton: Do you consider 94 retorts too many?

Answer: Yes we do ... We are unanimous in favour of no more work. We work seven days a week with never a slack, and if we did not get a wee bit breath between times we could not go on. Even the best of machinery needs overhaul.

The outcome of the discussions between the Management and the Retort-House men will be described at greater length in the next chapter. The point to be noted here is that the men felt generally that the benefits of improving technical and mechanical processes should accrue to themselves. The combination of the roles of Engineer and Manager in the early days of the undertaking meant that the man who devised technical innovations was also responsible for devising a policy whereby more and more gas could be sold at ever diminishing price. This combination of the duties of engineer and administrator accounts for the underlying note of impatience and even of indignation which runs through/
through the reports of Herring and Masterton to the Commissioners. They felt that the function of the gas engineer was to serve the consumer as much as (if not more than) the operative, and they feared that all their innovations would be nullified by the demands of these employees.

Since nationalisation the Scottish Area Gas Board has made plans for such technical improvements as the mechanical charging and discharging of retorts wherever possible. Conversion of this sort, according to the Board, not only makes for improved working conditions for retort house personnel but also lowers manufacturing costs with only the minimum of capital expenditure. Vertical retort extensions with mechanical producers have been introduced in the Edinburgh undertaking at a total cost, since 1949, of £222,600. In addition to the provision of new units, renewals and resetting of existing retorts have been scheduled or carried out, by the Scottish Board, on a large scale since nationalisation. The policy of the Board is to take the opportunity in the course of resetting operations to incorporate modern and improved features of design in order to increase output and to raise the standard of operating conditions. In continuous vertical installations heating systems of increased flexibility and efficiency have been provided, considerably easing the strain and anxiety of operation.

It has also been Board policy, when authorising the maintenance and repair of ancillary plant and equipment, to take the opportunity of introducing improvements with a view to providing greater convenience and economy in operation.

With regard to the technical aspects of production and distribution one benefit of nationalisation should be noted. Specialist personnel and equipment, formerly available to the larger establishments only, due to economic considerations, are now lent extensively to the management of other undertakings. The Edinburgh undertaking was already well equipped before nationalisation, but more widespread divisions in Scotland, covering many small, badly equipped undertakings, have been provided with improved amenities. Mobile laboratories have been introduced to enable the advantages of basic technical control to be brought to small and remote units. The centralised research undertaken by the Gas Council should also in the long run improve environmental working conditions at all undertakings, great or small, whether at Edinburgh or Inverurie. It must be remembered, however, that the Gas Council does not carry final responsibility for the improvement of environmental working conditions. It has defined its duty in the field of research "as the search for fundamental knowledge/
knowledge of existing processes, and investigations likely to lead to new ideas, processes and products and their development up to and including the pilot plant stage."

The co-operation of the Area Boards is required before the results of such research can be put to practical use. It is thus at the Area level that desirable schemes for improvement have to be considered in the light of what the consumer will bear.
CHAPTER III

Wages, Earnings and Hours of Work

In the period prior to the takeover by the Edinburgh and Leith Gas Commissioners a twelve-hour day was worked in the Gas undertakings, as was the practice in most other continuous-process industries. Against the argument that administrative difficulties precluded the introduction of the three-shift system the workers had no answer. Moreover it was held by the gas companies that although the carbonizing shift required twelve hours duty, it meant only six hours work. The men replied by pointing out the severe physical strain involved in twelve hours spent at the retorts.

One of the first acts of the new Commission in 1888 was to authorise a 51 hour week at 5d per hour to labourers and purifier men, with correspondingly more to tradesmen. Comparable rates of pay at this time were 5/- per day of twelve hours at Birmingham; at the South Metropolitan Gasworks, 5/3 per day was paid under similar conditions.

The following table shows wages, earnings and hours of work that were in operation at Granton by 1906:

Average weekly wage for Gt. Britain - 27/-: Bowley, "Wages and Incomes since 1860."

<table>
<thead>
<tr>
<th>Designation</th>
<th>Hours of Work</th>
<th>Rate</th>
<th>Wages per Week</th>
<th>Average Total</th>
<th>Total Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chargers</td>
<td>56</td>
<td>8 d.</td>
<td>37/ 4*</td>
<td>11d</td>
<td>38/ 3</td>
</tr>
<tr>
<td>Drawers</td>
<td>56</td>
<td>8 d.</td>
<td>37/ 4</td>
<td>11d</td>
<td>38/ 3</td>
</tr>
<tr>
<td>Producemen</td>
<td>56</td>
<td>8 d.</td>
<td>37/ 4</td>
<td>11d</td>
<td>38/ 3</td>
</tr>
<tr>
<td>Boilermen</td>
<td>56</td>
<td>6½d</td>
<td>30/ 4</td>
<td>9d</td>
<td>31/ 1</td>
</tr>
</tbody>
</table>

* 5/4d per shift.

- Gasfitters: 51 7½d 31/10½
- Bricklayers: 51 9½d 40/ 4
- Joiners: 51 9 38/ 3
- Masons: 51 9 38/ 3
- Painters: 51 8½d 36/ 1½
- Plasterers: 51 9 38/ 3
- Plumbers: 51 9 38/ 3
- Fitters: 51 7½d 31/10½
- Blacksmiths: 51 7½d 31/10½
- Labourers (including Hammermen): 51 5½d 23/ 4½
- Purifier Labourers: 51 6½d 27/ 7½
- Labourers (Trimmers): 70 6 35/ - 1/ - 36/ -

- Foremen: 6 & 7 days 48/ - 48/ -
- Clerks: 6 days 41/ 9 41/ 9
- Chemists: 6 days 44/ - 44/ -

Retort/ 

Retort-House Workers

At Granton works Herring began by insisting upon a 56 hour week for the chargers and drawers of retorts and the producer and ashmen. They were paid 5/4d for an 8 hour shift (i.e., 8d per hour) with time and a third for Sunday work. On November 18th, 1903, Herring took a ballot among the men upon the subject of Sunday work, although not binding himself to accept their decision. 84% of the men voted against it, but Herring nevertheless found that it was essential to the operation of the undertaking, and it was not abolished.

Boilermen and enginemen also worked a 56 hour week, but at a lower rate of pay. They received 4/4d per shift (i.e., 6/4d per hour).

It should be borne in mind, however, that duties were sometimes switched, and a charger or drawer might be put on work involving a lower rate of pay. There was no appeal against such a transfer as is shown by the following text of a "notice to workers" which was approved by the Commissioners in March 1912.

Transfer of Work, Carbonizing Department, Granton Gasworks.

I hereby give you notice that 14 days after this date you will, in accordance with the usual custom of the works, and as the exigencies of the works shall require, be liable to be transferred from your work on the eight-hour shift in the Carbonizing Department to work in the yard or elsewhere at the usual rate of pay applicable to such work.

If you decide not to go to the yard or elsewhere at the termination of the foregoing notice, you must so intimate to the foreman at the time you receive the above warning. In that case you will be held to have voluntarily left the service of the Commissioners, but should you duly apply, you may be re-engaged in the Retort-House during the following winter season if work can be found for you there.

If you accept work in the yard, the Commissioners will, in accordance with the usual custom, endeavour to transfer you back to the Retort House next winter season, and in the event of your not being so transferred back to the Retort House, you will be entitled to consider yourself dismissed.

Signature of Foreman on shift

Foremen received a flat weekly wage of 48/- . For this they were required to work six or seven days a week, for whatever hours required of them. As they were usually resident at the works they were available at any time or day.

In May 1908, one of the Commissioners, Judge Robert A. Douglas expressed concern at the number of men working beyond the fifty-one hours per week which had been supported by the Commission as far back as 1888. He requested Herring to/
to state the number of workmen employed on a longer working week than this. Herring replied that there were 243 (out of a total of over 700) and his reasons, which were largely technical, were accepted by the Commissioners.

In 1912 a period of comparative quiet was brought to an end by a spate of petitions to the Commissioners, usually drawn up by the workers themselves at the Gasworks. In April 1912 all workers earning sixpence an hour and under received an increase of 1d per hour. The shirt-workers immediately claimed that the disparity of pay for responsibility and domestic inconvenience entailed by shift-work had been diminished, and they petitioned in September 1912 for an increase. In resisting an outright increase to their demands, Masterton was following the example of his predecessor. In a paper to the Institution of Gas Engineers in 1905 Herring had drawn attention to the dangers of comparisons of efficiency of different undertakings, particularly with regard to the work done in the carbonizing departments. In Granton, for instance, he estimated that out of an eight hour shift the actual duration of labour for chargers of retorts was only three hours thirty minutes, and for drawers, three hours fifty-four minutes.

Masterton proposed that these retort-house men should be awarded an increase of 1/9d per week (i.e., 3d per shift) if they consented to operate 94 retorts instead of 84. He met a deputation on 16th December 1912 and offered the terms approved by the Commissioners. This interview, to which reference has already been made, is an excellent example of direct bargaining between master and men at the place of work, uninhibited by the formal machinery of a later era.

Mr. Masterton: You can have 1/9d more. But do 94 retorts instead of 84.

Reply: There is not a man fit to do it.

Mr. Masterton: This would bring your average up from 38/3 to £2. If Sunday pay were increased much more (this was one of the men’s claims) the Commissioners might shut down the works on that day. That would mean a reduction in your pay.

Reply: But we would not be working for it.

Mr. Masterton: Do you want Sunday labour?

Reply: Mr. Herring took a ballot on that question nine years ago, and we were unanimous not to work on Sundays.

Mr. Masterton: (changing the subject abruptly) Do you consider 94 retorts too many?

Reply: Yes we do. Different people have got a rise without any increase in work, so why should it be put on us? We are unanimous in favour of no more work. We work seven days a week with never a slack, and if we did not get a wee bit breath between times we could not go on. Even the best machinery needs overhauling.

There/
There is a great difference between us and the men who work five and a half days a week. They have Saturday afternoon and Sunday to rest; we never have a slack. The cost of living is rapidly increasing. Your pound to-day will only be as far as 16/- would ten years ago. Provisions are dearer and now coal is rising. It is about fourteen years since we had our last increase. We have now 1/4 off every week for superannuation and insurance.

Mr. Masterton: The Insurance was not the Commissioners' doing and you will receive the benefits.

The retort-house men did not in fact receive a rise until the 29th March, 1915, and even this was under the all round war bonus award to all the workers. The provisions of this award were: 2/6 per week to workmen earning from 20/- to 30/- per week, and 2/- to those between 30/- and 40/-, such bonus to continue until expiry of one month after the declaration of peace, and not to be calculated as wages in respect of Superannuation Fund contributions by employer or employed. In securing this award the retort-house men had secured the support of the National Union of Corporation Workers, and the union placed further demands before the Gas Commissioners, embracing all workers, in the following year. This claim went to arbitration before Sheriff A.J. Louttit Laing of Aberdeen. The award, made on 25th January, 1917, granted to those men whose earnings, including wages and war bonus, were forty shillings and over (this was the category embracing the retort-house men) an advance of one shilling per week.

Sheriff Laing added that ... "in giving the Chargers, Producer men and Drawers the advance stated in Finding (C)" - this refers to the extra shilling - "I am not to be understood as suggesting that these men should not again consider the proposals of the Commissioners that in return for attendance on a greater number of retorts, an increase in wages might be given."

No doubt the retort-house men commented in no uncertain manner upon the fact that Sheriff Laing was an Aberdonian. Whatever they said to each other, as they stoked the retorts next day, is lost to history. But we do know that nine of their number were received by the Works Sub-Committee of the Gas Commission on 21st May 1917, accompanied by the District Secretary of the National Union of Corporation Workers. They claimed that owing to the arduous nature of their work it was impossible to undertake any more retorts, and pointed out that the increase in the number of "stopped pipes" indicated the full pressure under which they were working. Mr. Masterton reminded the Commissioners that "at present two men charge twenty-one retorts per round hourly and four men draw this number, which equals for each charger 10½ retorts in 21 minutes, and for each drawer 5¾ retorts in 21 minutes. After allowing on an average, four minutes for sweeping/
Embraced.

23rd June

The increase in numbers of men at Masterton is an increase of the existing. It will be observed that Masterton's computation of actual duration of labour of chargers and drawers was 3 hours 20 minutes and 3 hours 52 minutes respectively, both smaller than Herring's original figures. Masterton admitted that his calculations were made in 1912, but since that time there had been no changes in the plan, in the methods used, in the character of the coal, nor in the period of charging and drawing. The only change had been in the introduction of new hands, and the inexperience of these new men may have added slightly, Masterton admitted, to the period of labour. This was perhaps the cause of the increase in the number of "stopped pipes" and also involved neglect by foremen who did not watch new men more diligently. Whether or not there were few or many "stopped pipes", argued Masterton, depended upon the men themselves, although once they had neglected them for a period, the pipes would give trouble through the entire life of the retort.

A schedule of time spent on the various operations had been submitted by the men. But "any time records compiled with a specific object in view", Masterton warned the Commissioners, "may be reasonably looked upon as suspect." He went on to assure the Commissioners that there was no reason to alter their already clearly expressed view as to the ability of the men to take on an additional amount of work for a proportionate amount of pay. He suggested that an offer might be made to the men as a war task and for the period of the war only; alternatively as a war task during the six winter months only. This offer should be that each gang of three men should operate twelve more retorts, and receive an increase of 6/8d per week of seven shifts. It will be observed that Masterton was departing from his original thesis of no more work, no more pay. The 12 extra retorts represented 14½% more work, while 6/8d added to the existing wage of 44/6d (which included war bonus and Sunday work) represented an increase of 15%. Alternatively, Masterton suggested that each gang of three men should operate 8 more retorts for 4/6d per week more (an increase in work and wages of 9½% and 10% respectively).

In spite of Masterton's appeal to the men's patriotism, they declined to increase the number of retorts as a war task or any other kind of task. The National Union of Corporation Workers which was now acting for the retort-house men along with many other categories of gasworkers, made their views known on 23rd June 1917, and insisted that a claim for an extra 10/- for all workers embraced/
embraced in Sheriff Louttit Laing's award should go forward. The Commissioners accordingly requested the Chief Industrial Commissioner to appoint an arbitrator. Sir Richard Lodge was appointed, and his award was issued on 27th July 1917, providing for an additional war bonus of 5/- per week to be paid from the first pay day of the current month, but not to be taken into account in the calculation of payment for overtime or for work on Sundays and holidays. "While it is impossible, in existing circumstances, to foresee the future," lamented Sir Richard in an addendum, "or to fix a definite limit of time within which no demand for increased remuneration may be put forward, it is to be hoped that this award will give sufficiently substantial relief to render further demands unnecessary as long as the country can escape any abnormal economic disturbance."

On the 19th September 1917 the National Union of Corporation Workers asked the Commissioners for further increase of 10/- per week for everyone, and for the conversion of war bonuses into war wages. On the 29th October, the Commissioners declined both requests, but adding that the union might, if it wished, apply for Board of Trade arbitration. At a mass meeting at Calton on Friday, 16th November, the workmen announced that unless their demands were conceded by the Commissioners, they would strike on the following Monday. Notice of this intention was published in the "Scotsman" on the 17th November. Mr. Masterton immediately got in touch with the Lord Provost and the Provost of Leith, who agreed to meet the General Secretary of the N.U.C.W. (Mr. Taylor) from London, and the District Secretary (Mr. Stewart) at the Commissioners' Office at Calton Hill. This meeting was duly held, and it was arranged that the Lord Provost and Provost Lindsay of Leith would address the men at a mass meeting to be held on the following afternoon (Sunday, the 18th). This large meeting passed off in an orderly fashion, and a ballot was taken as to whether immediate arbitration should be accepted.¹. The men were unanimously in favour of this proposal, and Sir Richard Lodge was duly appointed by the Chief Industrial Commissioner. Sir Richard attended at Granton Gasworks on 23rd November 1917 to hear the representatives of both parties. The N.U.C.W., on behalf of the men, were demanding that (1) war bonuses previously granted should be converted into war wages; (2) that a further increase of 10/- be granted to all male employees and 5/- to female employees as the advances granted since August 1914 were inadequate to meet the demands up to the present, and were lagging beyond advances to workers in other industries, and (3) that this award should become operative from 19th September (when the petition was first presented). At the meeting, Mr. Taylor (N.U.C.W.) withdrew the claim of the women workers, having satisfied himself that/

that the Commissioners were paying the standard wages laid down by the Minister of Munitions for that class of labour. With regard to the demands of the other workers, he pointed out the cost of living was increasing rapidly, and that the advances granted by the Committee on Production to workmen in other industries had aroused serious discontent among the employees at Granton. Furthermore, the distinction between skilled and unskilled workers had been disregarded in recent awards.

Mr. Masterton gave evidence for the Gas Commissioners. It was pointed out that the figures given in the "London Gazette" showed that the increase in the cost of living since the date of the last award (27th July) was extremely small, and that the action of the Food Controller was tending to reduce the cost of the prime articles of food. Stress was also placed upon the advantages enjoyed by the employees of the Commissioners over and above their wages; holidays, insurance, security of employment beyond that enjoyed in some industries cited by Mr. Taylor.

Sir Richard Lodge's award was made known on 26th November. Among the provisions, the claim that war bonuses should be converted into war wages was rejected, and the actual amount granted was considerably below the workers' demands. Sir Richard ruled that "war bonuses presently paid shall, in cases where they do not equal or exceed that sum, be raised to 12/- per week as compared with the prewar rate. This shall not be retrospective to 19th September, but shall be in force from and after the first full pay following the issue of this award. This shall not operate to reduce any wages or bonus presently paid. The next clause proved that "this award shall apply to those workers who were affected by the Award of 27th July last."

The Gasworkers held a mass meeting in the Shepherd's Hall, Victoria Terrace, on 6th December to consider the award, and judging from the current press reports, 1, 2, indignation ran high. It was alleged that the arbiter had given the Commissioners all they desired, and left the men to accept the lowest possible fraction of the claim. On the seven points in the award, five had been favourable to the Commissioners, and the two granted to the men could not possible have been less without cutting them away altogether. The men's decision was communicated to the Commissioners in a letter written the same night. "I am sorry to say," wrote Mr. Taylor, "that the award has proved anything but satisfactory to the men. I am instructed by the meeting to write to say that unless a satisfactory settlement is arrived at by Saturday morning, at 6 a.m., the men are stopping work. I will call and see you at Calton Hill tomorrow, 10 a.m."

1. "Scotsman" 7th December 1917.
10 a.m. re the position." This informal meeting was accordingly held, and Sir Richard Lodge attended. A memorandum of agreement was drawn up whereby the men accepted Sir Richard's award of the 26th November, and in addition, in view of advances recently granted by the Committee on Production in other industries, the Commissioners granted ex-gratia to the men affected by the award an additional 5/- per week, and to boys an additional bonus of 2/6d. As regards overtime, the Commissioners agreed that if, after inquiry, they were satisfied that the uniform practice was in favour of calculating bonuses in estimating overtime, they would accept the principle as from 3rd January 1918 (the date on which the ex-gratia increase was to come into effect). This agreement was approved by a meeting of the men in the Free Gardeners' Hall, Edinburgh, that evening.

Masterton carried out the inquiry about war bonuses. He reported to the Commissioners that war bonuses were calculated in estimating overtime at most gasworks in England, and at Glasgow, Aberdeen, Dundee, Perth, Falkirk, Kilsyth and Peterhead. The Investigations Officer of the Ministry of Munitions had confirmed that it was the practice in the engineering industry, and the Commissioners agreed to accept the principle in their undertaking.

On 2nd April, after application by the N.U.C.W., war wages were increased from 17/- to 19/6d with an additional 12½% bonus on earnings. This was designed to bring the municipal undertaking into line with private gas undertakings, the Committee on Production having delivered an arbitration award in a dispute between the National Gas Council and the National Federation of General Workers (which covered workers in private undertakings).

Difficulty was arising, however, over the interpretation of clause 3 of the agreement of the 10th December. Masterton's inquiry had led to the acceptance of the principle of computing war bonus as a basis for overtime. The men on shiftwork were claiming that their Sunday pay (time-and-a-half) should be calculated on the same basis. Masterton rejected this claim, pointing out that Sunday work could not be called "overtime". It was part of the regular work of shift men. The latest award (an increase of war wage to 18/6d) brought the wages of the carbonizing shift men to £3:6:6 per week (£173 per annum, and increase of £70 per annum over prewar wages). "I think it will be admitted," declared Masterton, "that the men have been generously dealt with, and that the Commissioners have fulfilled the terms of the various agreements." The Commissioners passed a resolution supporting Masterton's rejection of the claim, which, if accepted, would have added £350 per annum to the wage bill.

In October 1918, the shiftworkers demanded an extra 6/6d per week, war wages. The Commission's offer of 3/8d for a week of seven shifts was rejected, and/
and a Joint Conference was held under Sir Thomas F. Wilson. An offer of 3/6d per week was finally accepted, after two meetings.

On 10th January 1919 a claim was submitted to the National Gas Council by the National Federation of Gasworkers for an advance of 10/- per week for all workers over 18, and a reduction of hours to 44 weekly. While negotiations were going on at a national level between these two bodies (the Commissioners having agreed to be "guided" by whatever decision was reached) developments were taking place locally. A mass meeting of employees of the Gas Commission, the Edinburgh and Leith Town Councils and the Edinburgh and District Water Trust was held on 5th February. Among the resolutions passed were a demand for a 44 hour week; an adjustment of wages (to be not less than at present - a more modest proposal than the national one); all shiftmen to work to schedule (the schedule to be drawn up and exhibited in all departments); time worked and not included in schedule to be classed as overtime and paid accordingly.

After various claims and counterclaims, the shift workers finally agreed to accept a 48 hour week (they had previously worked 56 hours). Eight-hour shifts were to continue, but the rate per shift was increased by 6d. from 1st May 1919. On the 28th June, this was increased to 1/- per shift (plus the usual 12½%). An increase of 5/- in war wages per week was granted in December 1919. This last increase was granted to bring wages into line with those in other industries.

On 15th December 1919, a paragraph had appeared in the "Evening News" announcing that "the Gasworkers of the United Kingdom have intimated to the employers that if they concede the wage increase of 5/- a week recently given to the engineering and foundry trades on the same conditions, they will recommend its acceptance to those concerned."

On 17th March 1920 an application was made to the Commissioners by the N.U.C.W., on behalf of the Edinburgh branch, consisting of five demands:
1) That the present bonus be merged and consolidated in wages; (2) an increase of 15/- per week be granted to meet the cost of living; (3) Men now being given employment should receive minimum wage plus war bonus; (4) Minimum and maximum rates be abolished and a flat rate of wage substituted; (5) that overtime be paid at war wage rate. The Commissioners replied that they were henceforth being guided by the advice of the recently formed Federation of Gas Employers and that they consequently regarded demands (1) and (2) as national matters. To (3) they replied that a minimum wage had never been established in the Gas Industry, whilst the Federation of Gas Employers had been approached by Masterston with regard to (4), and they had counselled outright refusal. The Commission/

1. See Chapter "Negotiations and Negotiating Machinery".
Commission was already carrying out the policy demanded in (5).

At the time of these demands (the last formal application by the N.U.C.W. before the dissolution of the Commission on 2nd November 1920) the men were receiving a war advance of 32/9d per week, plus 12½% upon their prewar wages. The demands were considered at a conference attended by Edinburgh and Leith Corporations, Edinburgh and District Water Trust, the Gas Commissioners and the N.U.C.W., on 10th June 1920. The Commissioners had consulted the Federation of Gas Employers, and was prepared to award an increase of 1/- per day or shift (plus 12½% bonus). This was accepted.

On 6th January 1921 the Federation announced in answer to a threatened national strike that "in regard to wages a stage has now been reached when a halt must be called to all unreasonable demands." In fact, this same year was to see a reversal of the process which has continued steadily since 1914; wages were to fall. On 20th October 1921 there was a meeting of the Regional Joint Industrial Council in Glasgow at which it was suggested that the recently devised Zoning and Grading Scheme for gasworkers should be applied to Edinburgh. This scheme, however, did not include certain benefits that were enjoyed at Granton, e.g., free travelling, sick allowance, the six-shift week. Application of the scheme to Granton should therefore involve the relinquishment of these advantages. This suggestion was opposed by the N.U.C.W. and N.U.G.W. (representing 300 and 200 gasworkers respectively at Granton), but it was agreed to submit to arbitration. The Zoning and Grading scheme was applied to Granton, and the question of the benefits involved left to the National Joint Industrial Council.

On 7th November 1921 the first reduction - 4d per shift - was made under the Sliding Scale agreement of the N.J.I.C., whereby wages of gasworkers were linked to the cost of living. There was a further reduction of 1d per hour (in two instalments) with effect from 1st April 1922 (on 14th August came the second reduction of ½d per hour). At the next review in September, however, as the cost of living index had not shown a fall of seven points during the last three months, no alteration was made for the following three months. In 1923, there were reductions of ½d per hour in April and September, but the N.J.I.C. recommended an increase of ½d per hour in January 1924. Rates continued to fluctuate in this fashion as long as the sliding scale was applicable. In 1927 a member of the Edinburgh Town Council attempted to revise the system by moving that the Council recognised the principle that Joint Industrial Council schedule rates were minimum and not maximum. A letter was read out, in reply, from the Scottish Regional Gas Industrial Council, pointing out that the Zoning and Grading/

1. See Page 343.
Grading Scheme did not refer to minimum rates but standard rates (i.e., rates agreed upon by the two organisations represented on the Industrial Council) and that these standard or agreed rates could not be varied save by agreement between the two organisations. The resolution was rejected by the Town Council. Two years earlier, the Council had rejected a resolution calling for a minimum wage of 53/- for all employees.

The acceptance of the Zoning and Grading Scheme had led to prolonged controversy over the travelling facilities which had previously been enjoyed by the men. Since the opening of Granton, daily train services had run from Princes Street station direct to the gasworks, and the men travelled free of charge. The Commissioners decided to stop the free service from the end of September 1922, and declined to change their decision after seeing a deputation from the N.U.C.W. The matter was submitted by the N.U.C.W. to the N.J.I.C., who ruled that the Corporation of Edinburgh should have continued the facilities until the last full pay day of May 1923, and that they should accordingly pay to the workers concerned the amount due to them in lieu of these facilities as from 30th September 1922 to the end of May 1923 (a total sum of £1,500). Workers' fares continued to be paid up to 30th June 1929, when a decision of the N.J.I.C. permitted the Corporation to terminate them. Trains continued to run to Granton (at the workers' expense) until 31st August 1942.

The application of national and regional schemes led, as the men had been warned, to a rigorous interpretation, regardless of whose interest was involved. Thus a claim by the Granton shiftworkers for overtime pay for any time worked over an eight-hour day (e.g., when changing over from day shift to night shift or vice versa) was rejected in 1932, on the grounds that no overtime could be paid until a 47 hour week had been worked by day workers, or a 56 hour week by shift workers.

While earnings fluctuated in accordance with changes in the cost of living, the number of hours worked remained largely the same, up to and during the war (1939-1945). In 1946, the N.J.I.C. recommended that a six shift week should be introduced as soon as labour became available, but that seven shifts' pay should be given (instead of the seven and a half shifts' pay for seven shifts' work which had prevailed hitherto). Edinburgh Corporation accordingly introduced the six-shift week into its gas undertaking on 28th April 1946. This innovation meant a reduction for shift workers of one half shifts's wages per week, involving the following monetary re-adjustment:-
Basic Wage | War Bonus | Total
-----------|-----------|--------
7 Shift Week | 83/- | 42/ 2½ | 125/ 2½
6 Shift Week | 77/ 5½ | 39/ 5 | 116/10½

In September 1946, the N.J.I.C. approved an increase of 1/4d per shift retrospective to April. In April 1947, when the 44 hour week was introduced for day workers, the wages of shiftworkers were increased by 9d a shift to compensate them. The following April (1948) came a further increase of 1/- per shift.

Post-Nationalisation

Since nationalisation hours of work have remained the same, but wages of retort-house stokers at undertakings in the Granton category have risen to a total of 176/2 weekly.

This weekly figure is arrived at by calculating seven shifts (although six only are worked). Shiftworkers working on a Sunday are paid double time, calculated on plain time rates (Sunday work being that performed between 6 a.m. on Sunday and 6 a.m. on Monday). Where a shiftworker's rest day falls on a Sunday he is paid double time for the shift worked on the following Saturday. Thus, although Ministry of Labour sources give the figures for rates per shift the weekly wage of stokers is a more useful calculation. Wages of labourers (for a 44 hour week) have risen from 108/- in 1948 to 125/7d in 1952.

The annual holiday for gasworkers (whether day or shift workers) with twelve months' continuous service, calculated from the 1st June in any year, has been increased to a total of two working weeks with pay at plain time rates. Where a Gasworker has not completed the required service he is entitled to one day's holiday in respect of each complete calendar month of continuous service. This new agreement, although signed after the passing of the Gas Act was, in fact, in the final stages of negotiation before nationalisation.

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1. "Changes in the Wage Rates of Stokers, Labourers & Gasfitters, 1948-52" See Table over page
### Changes in the Wage Rates of Stokers, Labourers & Gasfitters, 1948-52.

<table>
<thead>
<tr>
<th>Designation</th>
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<tr>
<td>Gasfitter (1st class)</td>
<td>A.132/-</td>
<td>A.132/-</td>
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<tr>
<td>(Per week)</td>
<td>B.124/-</td>
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<td></td>
<td>D.90/10.482</td>
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x = Redesignated "North Thames-Metropolitan Area"

* = Hourly rate for 44 hour week: Time and one fifth if employed on shifts:
Double time for Sunday Shifts: Workers, other than shiftworkers, employed on night work receive time and one fifth (for not less than three consecutive nights) for all hours worked, except Sunday for which double time is paid.

The hours of labour for dayworkers are 44, exclusive of meals and overtime, to be worked over 5½ days and for shiftworkers, 48 a week, inclusive of mealtimes (6 shifts of 8 hours each). Shiftworkers are paid double time for work on Sunday, or where Sunday is their rest day, double time for the shift worked in the following Saturday. The Rates for Gas Fitters (2nd class) are 3d less an hour in all cases.

<table>
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<td>3/ 0%</td>
<td>3/ 5½</td>
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<tr>
<td>Labourers</td>
<td>2/9</td>
<td>A. 2/ 6½</td>
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<td></td>
<td>B. 2/ 4½</td>
<td>2/ 8½</td>
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</table>
Repairs and Maintenance Workers (including Labourers).

Included in this category are gasfitters, bricklayers, joiners, masons, painters, plasterers, plumbers, slaters, fitters, blacksmiths, and labourers.1

Their rates of pay at Granton in 1906 ranged from 9½d an hour to the bricklayer to 5½d to a labourer. A 51 hour week was usually worked.

One of the earliest disputes at Granton was with the bricklayers, and it led to an agreement which was honoured from that date onwards. In 1911, the secretary of the Operative Bricklayers' Society, William Dalrymple, claimed that certain work connected with repairs of retort-settings which formerly had been performed by bricklayers was gradually being transferred to labourers and handymen.

Masterton communicated with other undertakings and reported to the Commissioners that "in no case are bricklayers employed in other gasworks for the purpose of patching retorts" (as apart from the renewal of settings and the building-in of retorts). He therefore suggested to the Commissioners that no advantage would be derived by seeing a bricklayers' deputation. The Commission, however, thought otherwise, and received Mr. Dalrymple and two members of the Bricklayers' Union. It was decided that only bricklayers should be used to fill up holes in the retorts during the annual repairing season, and Masterton should discontinue the use of handymen and labourers for this work. The deputation did not claim the right to repair cracks in the retorts which could be attended by unskilled men.

Thus, early in the history of Granton, bricklayers won their place upon the maintenance staff.

In June 1912 an increase of ½d per hour was awarded to joiners. These tradesmen had already (1900-1906) enjoyed an increase twice as great as any workers, although their pay at Granton fluctuated between 4½d and 2½d below the trade rate for the district of Edinburgh and Leith. The award of a further ½d per hour to all workers earning 6d per hour and under, in April 1912, led to petitions from other workers to preserve their differentials for skilled work. In June, petitions were received from blacksmiths, fitters and labourers, purifier men, and painters and their labourers. Only the blacksmiths were successful, however, receiving an increase of ½d to 8d an hour. The Commission accepted Masterton's recommendation that no award was justified which was ostensibly intended to bring the rate up to the recognised district trade rate. It was held that the regular employment enjoyed by Granton workers justified the payment of a slightly lower rate. The blacksmiths were not satisfied with their award, and a letter of the 3rd March 1913 from John Thomson, General Secretary, Associated Blacksmiths and Ironmongers Society, Glasgow, stated their case/1

1. See Page 290.
case to the Commissioners: "I have been instructed by our Edinburgh branch to make application for an advance of ½d per hour, as the rate for the Edinburgh district is 39/- a week. I am assured that you will recognise the reasonable nature of the application, and concede the modest request. Apologising for troubling you, and thanking you in anticipation of a favourable reply ..." Mr. Thomson's thanks were premature; the reply was not favourable. Masterton informed the Commissioners that although blacksmiths in general engineering firms in the Edinburgh district received up to 9½d an hour, they received no paid holidays and were subject to fluctuations of trade. Blacksmiths at Granton, on the other hand, received nine days with full pay and belonged to the superannuation scheme. These two concessions were worth an extra 1½d an hour. They were also carried to and from work by rail, free of charge. Six men would be affected by the award, and the total extra cost would be £33:3:- a year. The application was rejected.

A similar fate met the application of the Gasfitters made in the same month. "Work being of a more onerous and technical nature," stated their petition, "requiring greater skill and intelligence ... and in view of the increased cost of living and rents, the present wage is not of the same value as when formerly agreed upon." They therefore thought themselves justified in requesting an advance in their rate of pay of one penny an hour. "It is 13 years since we last received an advance (men at present receive 7½d per hour for a 51 hour week, i.e., 31/10½d)."

But this 31/10½d, Masterton pointed out, was the standard rate in the district, and at Granton they enjoyed additional advantages such as regular work, no broken time, holiday pay and free travel. Annual holidays and superannuation alone brought the rate up to 7.92d an hour, i.e., 33/8d per week. Furthermore, tools were supplied by the Commissioners, unlike other undertakings. At this time, the hourly rates for gasfitters at Dundee were 8d an hour, at Glasgow 7½d an hour, at Perth 7¾d, and at Aberdeen 6¾d.) The concession of one penny an hour would have cost the Commission £480 per annum, and it was accordingly refused.

In July 1913 the N.U.C.W. took up the case of tradesmen employed at Granton, reiterating the demand for a standard rate of pay. The reply of the Commissioners was that standard rates are paid only if the men are not employed continuously throughout the year.

In March 1914 another application from the gasfitters was rejected, but it was resolved that the wages of any labourers still earning below 6d an hour should be raised to that amount as from 15th May.
The question of maintenance work done beyond the city boundaries was raised in February 1915, when application was made to the Commissioners for "country money" for work performed in such distant localities as Juniper Green, Balerno, Davidson's Mains and Corstorphine. It was decided, upon the suggestion of the Engineer and Manager, that regular hands should travel one way in the Commissioners' time and one way in their own; that a full working day had to be wrought on the job; that the time of travelling should not be reckoned as overtime; and that the Commissioners should continue to pay train fares.

The Associated Blacksmiths' and Ironworkers' Society returned to the attack for higher pay in October 1915. The Engineer had always classed the blacksmiths as "jobbing smiths" whereas the society claimed that they were "general smiths." Wages paid at Granton were 8½d an hour for one, and 8¾d an hour for five, plus 2/- war bonus, altogether 38/11½d and 37/1d respectively for a week of 51 hours, in addition to the various benefits previously mentioned. The wages of jobbing smiths for the Edinburgh District at this time were 9d an hour, or 38/3d for a week of 51 hours, whilst the wages of "general" smiths were 9¾d an hour plus a bonus of one penny an hour, of £2:3:7 for a week of 51 hours. The Commissioners accepted the claim that blacksmiths at Granton performed the work of "general" smiths and offered an increase to bring them up to 9d an hour, in addition to war bonus and other benefits. When the Society cast doubt upon the monetary value of these benefits as assessed by Masterton, and said that they attached little value to them, the Commission instead offered the standard rate of wages for the time, and under trade conditions, other benefits to cease. This was accepted. No claim was put forward on this occasion on behalf of the Blacksmiths' hammermen, as the war bonus and other benefits had already brought their wages above the standard rate for Edinburgh and district.

The award of Sheriff Louittit Laing on 25th January 1917, in the arbitration between the Commission and the N.U.C.W., covered the labourers. The men had claimed 3d an hour more for all grades, double time for Sunday work and time and a half for overtime during the week. Men whose earnings, including wages and war bonus, were under 30/- weekly received an advance of 2/- weekly; 30/- to 40/- an advance of 1/6d; 40/- and over an advance of 1/-. The ordinary day work men (as distinct from the shift workers) received time and a half in respect of both Sunday work and overtime during the week.

Sir Richard Lodge's award of an additional war bonus of 5/- on 27th July 1917 and of an increase up to 12/- weekly on 26th November 1917 have already been mentioned. The various categories of labourers participated in the demonstrations and meetings which preceded the ex-gratia award of 5/- a week, and the/
the concession of the Commissioners in calculating war bonuses for the purpose of overtime.

The somewhat loose classifications in operation at this time meant that workers attempted to secure recognition as tradesmen if the standard rates were higher than the omnibus rates for gasworkers, but did not press their claims to a trade if the reverse operated. One example of this was the worker employed at Granton as slater. This man (David Riddle) started employment with the Commission as early as 1888. Up to 1910 he was employed on slater and drainage work, and in that year he was receiving 8½d an hour (¾d below the standard rate). In 1910 he was also given the job of factor to the Commissioners' property, the supervision of this property, and the collecting of rents amounting to £731 per annum. This work involved altogether about one day and a half a week, the remainder of the time being occupied on the work of slater. Riddle, as a general handyman, was included in the various advances and war bonuses of the war period, and reached a higher rate of pay than that enjoyed by slaters. By 1917 he was earning 10d an hour, plus 3/- war bonus. In that year, however, the standard rate for slaters was raised to 1/- an hour, and an arbitration award in November 1917 gave slaters in Scotland a bonus of 1½d an hour. At this point Riddle raised the fact that he was a slater by trade, and in February 1918 the General Secretary (William Cross) of the Amalgamated Slaters' Society of Scotland wrote to the Commissioners asking that the Commissioners revert to the procedure of paying their slater ¾d an hour less than the local trade standard. "As a general rule", the letter stated, "Corporations pay the standard rate of wages, and while we do not view with favour the payment of less than the standard rate, we understand that this man is paid for certain holidays, and in view of that we have no objection to the old arrangements of ¾d less than the standard in this case." Masterton informed the Commissioners that "it was never contended that he should receive only slaters' rates of pay, and it is only now when this rate is higher that the plea is advanced ... I am of the opinion that this man cannot be classified as a slater, and we have not sufficient slater work either at Edinburgh or Granton to keep a man continuously employed." The Commissioners, however, were not satisfied with Masterton's recommendation. Having ascertained that the engagement of separate factor would cost them from £56 to £75 per annum they decided to put Riddle on the more remunerative scale then operating, i.e., to pay him the slaters' standard rate less ¾d an hour for special advantages such as holidays, to take effect from the next pay day.

The confusion over men receiving standard rates (or ¾d less) led to a special clause in the next arbitration award for gasworkers, which was issued by Professor/
Professor J.B. Baillie (representative of the Chief Industrial Commissioner) on 2nd April 1918. This award, which under clause 7, raised the war advance to 18/6d above prewar weekly wages (See page 297) stated in clause 8:- "The following are excluded from clause 7: (a) those whose wages are regulated by standard rates (b) members of the watching force (c) part-time workers (d) old or partially unfit men (e) employees engaged only on seasonal work (f) employees receiving board and lodging (g) temporary assistants employed since the outbreak of war for whom no fixed wages existed at that date."

A further clause in this award granted the 12% bonus to gasworkers represented by the N.U.C.W. who were not yet in receipt of it, and this immediately led to a flood of applications from various tradesmen and semi-skilled workers. The joiners in January 1918 had been awarded an increase of 2d an hour (bringing their rate up to 1/3d) but the arbiter had stated that no petition for a change of rate was to be presented earlier than the two weeks preceding May 31st, 1918. Professor Baillie's award to other workers in the gas industry led to an immediate demand by the Associated Society of Carpenters and Joiners for the 12% which, they claimed, had been awarded to joiners by the Committee on Production. This claim was not strictly accurate; the Committee had in fact awarded the 12% only to those joiners employed upon the construction of buildings for Government authorities. The Granton joiners, whose prewar wages were 40/4d weekly, were at the time of their claim earning 61/7/4d. The Chief Industrial Commissioner ruled that the Granton joiners should be granted 12% bonus but that the advance of 2d an hour previously granted would merge in this 12%. This meant that the joiners were not entitled to any increase.

Among other applications for the 12% were petitions from the coppersmiths, brassfinishers, blacksmiths' hammermen and machinemen from the Fitting Shop. These petitions did not make it clear as to which award of 12% they were claiming. The trade unions seem to have been confused as to the scope of different awards. The Committee on Production, for instance, had in March awarded the 12% to workers in gasworks. But this had been granted on application by the National Federation of General Workers which was chiefly concerned with private undertakings. No Granton employees were at that time members of this union, and it was not applicable to the Commissioners' undertaking. It had been left to the N.U.C.W. to claim - and secure - analogous conditions for their members in Professor Baillie's award of 12%. Some tradesmen, on the other hand, were covered by Ministry of Munitions awards to the engineering and foundry trades; the blacksmiths, for instance, came in this category and enjoyed their 12% without reference to gas industry awards.

The/
The National Society of Coppersmiths and Braziers, for instance, cited the Committee of Production award in its application for the 12½% for members employed at Granton. They should have cited the N.U.C.W.'s agreement, but even if they had done so they would still not have been eligible for the 12½% under that agreement as their men were not members of the N.U.C.W. The coppersmiths, whose wages had risen from 34/- prewar to 54/- in 1918, were refused the increase upon the advice of the Investigations Officer of the Ministry of Munitions. The brassfinishers (prewar wages 31/10/- per week, 1919 wages 51/10/-), applied for the 12½% through the United Journeymen, Brassfounders, Turners, Fitters' Finishers Association, but the Commissioners replied that they had been guided in their fixing of wages for this trade by those paid in the Gas Meter trade (as requested by the Gas Meter Employers' Federation). The Commission did in fact pay the 12½% after it had been awarded through these channels by the Committee on Production, to take effect from first full pay day after 1st January 1918.

Application was also received from the Amalgamated Blacksmiths and Ironworkers' Society for the 12½% to be granted to the hammermen who worked in the blacksmiths' shops at Granton. These men had not been mentioned in the Ministry of Munitions award to blacksmiths. They came under N.U.C.W. applications and benefited by these arbitration awards until March 1917. In that month the Committee on Production had granted certain advantages to workmen in the engineering and foundry trades, and the hammermen had asked to come under this category. After long correspondence, the Commissioners had consented to put the hammermen under these awards, and they had received them as they were issued, raising their wages in various stages from 27/7½d per week prewar to 47/7½d in 1918. The society was now appealing for the 12½% award to the gas industry. The Commissioners, after consulting the Committee on Production, decided to offer the hammermen (who were little more than handy labourers) the same terms as general labourers had obtain under the agreement with the N.U.C.W., i.e., 18/6d per week war wages plus 12½% bonus. This would involve the merging of a portion of their present 20/- war wage into the 12½% bonus. The society was not satisfied with this offer, and preferred that their claim should go to the Committee on Production. The arbitration proceedings, held at the Christian Institute, Glasgow, on 17th May, resulted in the grant of the full 12½% on existing earnings to the hammermen, as from October, 1917.

Out of the twenty-five men employed in the Fitting shop as machinemen, two were members of the Amalgamated Society of Engineers at this time. The Commissioners had, however, paid them the various increases awarded to gasworkers, bringing their prewar wages of 29/9d per week to 46/9d. In December 1917 the A.S.E./
A.S.E. wrote to the Commissioners demanding the increase awarded by the Committee on Production. The Ministry of Munitions representative in Edinburgh confirmed that, as the A.S.E. was a signatory to Committee on Production awards, the Commissioners should be paying these men a war increase of 20/-, and this was done. The other twenty-three machinemen, however, came under the N.U.C.W. awards and continued to receive 17/-. These two men did not qualify for the 12½% bonus and their wages fell behind those of the N.U.C.W. members when the latter received the 18/6d increase plus 12½%. Upon application by the A.S.E. for the bonus, the Commissioners suggested that the two A.S.E. members should be offered the same terms as the N.U.C.W. agreement laid down, and this offer was accepted.

The various tradesmen benefited from the reduction of hours at the end of the war. In March 1919 hours of bricklayers, joiners and painters were reduced to 44 hours, while those of blacksmiths and brassfinishers were reduced from 51 to 47.

In the post-war period the Granton bricklayers accompanied a demand for higher wages with threat of a strike. A letter of 12th January, 1921, from the Divisional Organiser of the Operative Bricklayers' Society asked that the working conditions and rates of wages agreed upon by his society and the Scottish Steelmakers Wages Board should be put into operation. The Corporation Gas Committee, following a policy that had been adopted towards the end of the war, consulted the Federation of Gas Employers. This body replied that the agreement cited had nothing to do with bricklayers employed, and urged upon the Gas Committee "the importance of refusing to pay higher wages to bricklayers employed at Granton." The Corporation thereupon refused the society's request, but after a strike had been threatened they agreed to meet a deputation on 10th February. This deputation put forward a demand for 2/7d an hour; for supplies of overalls kept clean and in good condition by the employers; for the right to stop work 15 minutes before the usual time when engaged on dirty work, and to wash themselves with soap and towels provided by the management; for seasonal bricklayers to receive one day's holiday with pay for every two months' work; and when engaged on old work (i.e., repairing, taking out or relining old chimneys, repairing boiler flues, fires and gas producers) or on work of an exceptional nature, they should be paid 2/- per day or part of a day extra. In reply the Gas Committee drew attention to the free travel, sick pay, holidays, etc. which brought the pay of Granton bricklayers at least up to that of the Glasgow area. They rejected the claims of the society which submitted them to arbitration. In an award of 13th September (Glasgow Gas Works v Glasgow Operative Builders' Society) it was held/
held that bricklayers' conditions in the gas industry were not analogous to those in the steelmaking industry, and the claims were rejected. In 1922 the Corporation took the offensive after a complaint had been made by the Building Workers' Association as to the wages received by a mason employed on repair work by the Gas department. The mason was dismissed, a labourer was engaged to do his work, and an application to send a deputation was refused. When the reduction in the wages of plasterers led to a strike in the Edinburgh district, the only member of the Plasterers' Union, employed by the Gas Department stayed on at work (by permission of his union) pending a decision, but the Corporation adhered to the standard rate when it was reduced. In October 1922 the bricklayers objected to the times of the Granton trains which took them to work half an hour before starting time (they worked a 44 hour week compared with the 47 hours worked by other Granton employees) and they were allowed to work a 47 hour week if they wished, but at plain time rates. In November it was decided to pay them standard rates, but sick allowances were stopped in consequence. The bricklayers did not lose insofar as they were henceforth covered by the working rules and regulations drawn up by the Edinburgh, Leith and District Building Trades Association. Rule 1(b) allowed them an extra penny an hour if employed on building furnaces, flues, etc. in Gas Works. Thus the bricklayers were placed under similar standard rate conditions - with the attendant advantages and disadvantages - to those afforded to the blacksmiths seven years before.

In 1924, when the rates of gas workers rose by ½d an hour, increases of ½d an hour were also granted to plasterers and to craftsmen in the building industry (represented by the Amalgamated Society of Woodworkers). An application by the National Union of Sheet Metal Workers for the restoration of their 5/6d bonus, withdrawn two years before, was, however, rejected. The Corporation honoured an agreement made in 1925 (February) between the F.G.E. and the A.U.B.T.W. whereby 2d. an hour above the local standard rate should be paid to bricklayers until 1st May 1925 when it should be reduced by ½d, and reduced by a further ½d on 1st September 1925. A national agreement between the F.G.E. and the A.U.B.T.W. in the same year assured bricklayers and masons the same holidays as those given to day gasworkers. The Granton bricklayers also secured the continuation of their travelling until 16th July 1925. In October 1925 the wages of labourers in the Gas Fitting shop were increased from 50/8d weekly to the 52/3d paid to other labourers in the gasworks. The Gas Fitters did not secure nationally agreed conditions until 1928, when the Scottish Regional Gas Industrial Council ruled that 1/4d an hour be paid to gas fitters, and that wages should increase and decrease the same as gas workers under the grading scheme.
The blacksmiths' hammermen, who during the war had claimed the conditions afforded to the engineering trade remained content during the postwar period until as late as 1931 when the National Union of Public Employees in June of that year, claimed on their behalf that their wages should not fluctuate with outside rates paid to hammermen, but should be governed by rates paid to fitters' labourers in the gas industry, thereby entitling them to receive holiday with pay. At the time of this claim the hammermen were earning £2:13:4½ weekly as compared with fitters' labourers who earned £2:14:8d. General labourers, however, earned only £2:12:3½d. No action was taken by the Corporation.

The demand for holidays with pay was taken up, in 1935, by the engineering fitters, turners, machinemen, boilermakers, blacksmiths, electricians and painters at Granton. There was no application from the slater; the arrangement which had been arrived at after prolonged controversy in 1918 was still observed and this trade was granted an annual ten days' holiday in exchange for one penny an hour below the standard rate. The bricklayers were likewise silent, having secured their ten days' annual holiday by a special agreement between the F.G.E. and the A.U.B.T.W. The Corporation suggested that the tradesmen concerned could have their holidays if they consented to accept one penny below the standard rates, but this was not accepted. In May, 1937, the Gas Joint Industrial Council awarded bricklayers and masons 12 days' holiday with pay and one penny an hour above standard district rate, and it was decided to extend the paid holidays to other tradesmen.

A grievance was raised by the gasfitters in December, 1936, in connection with the Gas Sub-Committee's "common list" policy. Gasfitters were at certain times reduced to labourers' rates, and although this involved only a slight change in the nature of duties it meant that they lost 10/5d a week in wages. The N.U.P.E. appealed for these men to be granted labourers' rates plus one penny an hour, when switched from gasfitters' work, and the matter was taken up by the Regional Joint Industrial Council. The decision went against the N.U.P.E., but it was later decided to classify the men concerned into three groups; temporary men who would be paid the labourer's rate, men who had performed three years' service and satisfied the management as to their good work would get ½d an hour above labourer's rate, and men who had performed three years' service and shown special knowledge would get an extra penny. The union objected to the powers of assessment left in the hands of the management, but the award was accepted. In April, 1938, the N.U.P.E. asked for representation on the Electricity and Gas Joint Industrial Councils but no action was taken. When in 1941 the N.U.P.E. asked/
asked that employees working special A.R.P. shifts should revert to prewar hours, the Committee replied that the Gas Joint Industrial Council had agreed to the terms in September 1939. The reply of the N.U.P.E. was that they were not represented on the N.J.I.C. Nevertheless the Committee continued to cite J.I.C. findings in reply to the N.U.P.E., as when, for instance, they appealed for a free issue of clogs and boots to purifiers' labourers. It was not until July, 1944, that clogs were issued.

An appeal by the District Secretary of the Boilermakers, Iron and Steel Shipbuilders' Society in 1946 inaugurated a new emphasis in wage demands. They complained that Edinburgh was paying union members at Granton the mere standard rate which at that time involved a weekly wage of £5:14:9d. In Dundee, the union claimed, the gas undertaking was paying £5:19:6d. No action was taken.

The gasfitters were successful in 1947 in securing an increase in the basic trade rate for Scotland of 1.54d an hour. Granton gasfitters were now paid 2/4d an hour.

In October 1948 a new Gasfitters' Classification Scheme was brought into operation by the Scottish R.G.I.C. Examinations and trade tests were established (See page 389) and appropriate rates of pay attached to the various grades.

Apprentice gasfitters were to receive the following rates:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>of Grade II Gasfitters' Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>33 1/3rd%</td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>66 2/3rds%</td>
<td></td>
</tr>
<tr>
<td>5th</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

Grade II gasfitters were to receive 4.5d per hour above the rate determined from time to time by the Scottish R.G.I.C. for a labourer in a Category "A" undertaking.

Grade I gasfitters were to receive 6.5d per hour above the rate determined from time to time by the Scottish R.G.I.C. for a labourer in a Category "A" undertaking.

Appropriate increased rates of pay were to be granted during the period not exceeding one calendar month from the date of passing the final stage of the Examination.

With regard to the problem of demarcation which had been the subject of so much controversy at Granton and elsewhere, clause (6) of this new agreement stated that "nothing in this scheme shall prevent an Undertaking continuing to operate a system of maintenance to be carried out by workmen (to be known as "Maintenance Men") who may be trained for maintenance work only and who are not qualified gasfitters."

Special
Special provisions were introduced to safeguard rates of pay of employees receiving higher rates (in 1948) than the new agreement provided. Clause (39) stated:

"(a) A gasfitter who is receiving a rate lower than that of a Grade I Gasfitter shall be rated as a Grade II Gasfitter unless he shall be accepted as a Grade I Gasfitter under Clause 22, Sub-sections (d) and (e) (referring to educational qualifications and length of service required for upgrading) in which case he shall be upgraded with effect from the inception of the Scheme.

(b) Where higher rates than those provided under this Scheme are being paid to men now in the employment of an Undertaking no reductions are to be made in the rates of pay to these men, but future awards or part thereof shall not be given until the agreed rate attains to that existing in the particular Undertaking.

(c) The new rates under the Classification Scheme will apply to new entrants."

Under this scheme the rates of Granton gasfitters thus rose from 2/4d an hour to just under 2/9d (in 1949 the Ministry of Labour and National Service gave the weekly wage as 122/6.436. This is 6.5d per hour above the labourers' rate for that year).

The major gains to most classes or workers in 1947 were the award of two normal working weeks' holiday (in addition to the usual statutory holidays) and the introduction of the 44 hour week. This latter agreement declared that the present rate of output should be maintained or improved, that an end must be made to morning and afternoon refreshment breaks, and all "periods of grace" at starting and finishing time, as well as absenteeism and bad timekeeping. There was controversy between the Granton day workers and tradesmen and the management as to how the reduction of hours should be made. Under the 47 hour week they had worked (Monday to Friday) from 7.30 - 12 noon, 12.40 - 4.45 p.m. and on Saturday, 7.30 - 11.35. Under the new 44 hour week they wished to work 7.30 to 12 noon, 12.40 - 4.30 p.m. during the week, and 7.30 - 11.5 on Saturdays. The Manager put forward as a countersuggestion, 7.45 - 12 noon, 12.40 - 4.30, and 7.45 - 11.20 on a Saturday. The Manager's schedule was adopted.

In April 1947 an agreement was drawn up between the Federation of Gas Employers and the Confederation of Shipbuilding and Engineering Unions to extend the increased pay, holidays, conditions and allowances (recently granted to gasworkers) to tradesmen and semi-skilled workers who were members of unions affiliated to the Confederation. Three zones were established, the London Zone, and Provincial Zones "A" and "B". Zone "A" comprised those undertakings whose annual...
annual sales of gas exceeded 500 million cubic feet and "B" those undertakings whose annual sales fell below that figure. Granton fell well within Zone "A". The usual classes were inserted recognising the need for maintaining or improving output, both sides agreeing "to use their best endeavours". A 44 hour week, spread over 5½ days, was established with effect from 5th May 1947. In any pay week, time over 44 houses was to be paid at time-and-a-quarter for the first two hours and thereafter at the rate of time-and-a-half. Overtime rates were not to be withheld where a workman had failed to work 44 hours because of sickness or with the leave of the management. Sunday work (i.e., between 6 a.m. Sunday and 6 a.m. Monday) was to be paid at the rate of double-time. It was agreed that overtime in connection with emergency work, breakdowns, or maintenance work that could not be done during normal hours should be undertaken by the workers concerned. The rates of pay agreed upon covered work in a retort house in action or on a gas water plant (types of work which tradesmen had on occasions in the past claimed to be "abnormal"). This type of work was henceforth deemed to be normal employment in the gas industry. An annual holiday of two working weeks was granted to all workers covered by the agreement who had served for twelve months. Workers below that would receive one day's holiday in respect of each calendar month of service, provided that his engagement had not been terminated owing to misconduct. The same national and local holidays should be granted as were allowed to gasworkers generally. The following schedule brought under one comprehensive scheme the many various tradesmen and workers who for nearly half a century at Granton had conducted their own demands for improved pay and hours of work, at first by the presentation of petitions drawn up by men on the place of work, and later through the national and regional branches of their individual unions.
### Standard Rates of Pay (Inclusive of war bonus) Per Hour

<table>
<thead>
<tr>
<th>Designation</th>
<th>London</th>
<th>Provinces</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Blacksmiths</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Brass Finishers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Carpenters</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Chemical Plumbers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Coachmakers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Coachpainters</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Coppersmiths</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Drillers (machine)</td>
<td>2/7</td>
<td>2/4</td>
</tr>
<tr>
<td>Electricians</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Engine Fitters</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Engine Turners</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Foundry Trimmers</td>
<td>2/7</td>
<td>2/4</td>
</tr>
<tr>
<td>Furnace Men (Foundry)</td>
<td>2/7</td>
<td>2/4</td>
</tr>
<tr>
<td>Hammermen (Blacksmiths')</td>
<td>2/9</td>
<td>2/6</td>
</tr>
<tr>
<td>Holders-Up</td>
<td>2/11</td>
<td>2/8</td>
</tr>
<tr>
<td>Motor Mechanics</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Moulders</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Patternmakers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Pipefitters</td>
<td>2/8</td>
<td>2/5</td>
</tr>
<tr>
<td>Platers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Plumbers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Retic Pipfitters</td>
<td>2/7 ½</td>
<td>2/4½</td>
</tr>
<tr>
<td>Rivetters</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Sheet Metalworkers</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Welders</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>Woodcutting Machinists</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>(Carpenters' Shop)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodcutting Machinists</td>
<td>3/-</td>
<td>2/9</td>
</tr>
<tr>
<td>(Coachshop)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The same zones were established in agreement between the Refractory Users Federation (upon which the Society of British Gas Industries was represented) and the A.U.B.T.W. The standard hourly rate established was to be the hourly rate (Grade "A") prescribed for bricklayers and masons by decisions of the Scottish National Joint Council for the Building industry, and this rate was to serve as the basis for bricklayers employed on the setting, re-setting and repair of carbonising and gasmaking plant, boiler settings, chimneys and furnaces. To this basic rate would be added various extra rates according to the exact nature of the work done. For the new construction of carbonising plant and industrial furnaces an extra 4d would be paid; for red brickwork of buildings, housing carbonising plant, an extra 1d; for repairs to and the dismantling of Carbonising plant an extra 5d; and for chimney work the following extra rates:
The difference in the rate between new work and repair work led to a more precise definition of the two types. New work included the building of new settings of vertical retorts and the complete reconstruction of such settings. In certain circumstances, however, this work was to be regarded as repair work, thus qualifying for a further penny an hour. This was when the division walls were not air-cooled, or where retorts were being built parallel to and within 20' of another working bench of chambers from which red hot coke was discharged at regular intervals, thereby engulfing the bricklayers in fumes. Repair work included the renewal of retort settings, coke oven settings, and the repair, maintenance and partial reconstruction of existing furnaces or boiler settings, whether or not the working conditions were hot, cold or dirty. Partial reconstruction was considered to be new work in those cases where it was not necessary for a man to enter the interior of a fuel or furnace. These precise technical definitions ended many years of controversy over the work carried out by bricklayers, masons and labourers in the construction and repair of retort house and other settings.

The normal working week of the bricklayers and masons was henceforth fixed at 44 hours, with a starting time not earlier than 7.30 a.m. The mid-day break was to be one hour (although it could be reduced to half an hour on the authority of the District secretary of the A.U.B.T.W.) and when at least 4 hours work was performed in both the morning and afternoon period, tea could be taken at or near to the man's working position. The A.U.B.T.W. granted "a general permit to work 3 hours' overtime per week at the appropriate overtime rates" (this was in marked contrast to the occasion when bricklayers at Granton were permitted by the Manager to work three hours overtime if they accepted plain time rates!). The union, however, agreed that, in all reasonably necessary circumstances, where application was made to the Divisional (not District) Secretary of the union, "permits to work overtime" would be granted for the following periods: two hours actual working time per day for the first five working days in each week, in addition to the three hours mentioned above, making 13 hours overtime in all, or a maximum of 57 hours' actual working time per week. In certain circumstances of exceptional urgency, overtime in excess of the 57 hours might be worked for a period of up to three days, but longer than/
than that would require the permission of the Divisional Secretary. All times worked in excess of normal working hours were to be paid for at the rate of time and a half from Monday to Friday for the first 4 hours each day, with double time thereafter until starting time next morning and double time thereafter if work by the same men continued without a break (meal times excepted). On Saturday the rate of time and a half was to be paid after normal working hours up to 4 p.m. and double time after 4 p.m. until starting time on Monday. Full normal time was to be worked before overtime was to count, unless through no fault of the workman he was unable to fulfil this provision. A 44 hour week was to be guaranteed by employers. Where night gangs were employed 45 hours weekly could be worked (9 hours each night for five nights). Separate men from those at work during the day should be employed, and, if at least 4 nights consecutively were worked, an extra 3d an hour would be paid. This 3d was not to be subject to overtime rate calculations. Overtime after normal night working hours was to be paid at the rate of time and a half for the first 4 hours per day and double time afterwards. When working shift conditions, the following conditions applied: first shift - 6 a.m. to 2 p.m., 8 hours' work less a half-hour meal break (8 hours to be paid); second shift - 2 p.m. to 10 p.m., 8 hours' work less half-hour meal time (10 hours to be paid); third shift - 10 p.m. to 6 a.m., 8 hours' work less a half-hour meal time (12 hours to be paid). Lodging allowance of 6/- was to be paid to bricklayers and masons sent to jobs more than 20 miles from home. Men employed between a radius of 3 miles and up to 30 miles from their homes were allowed travelling expenses and travelling time (paid at the standard hourly rate). Between 3 and 6 miles, workers were allowed one half hour per day, over 6 and under 12 three-quarters of an hour, over 12 and under 20 one hour, over 20 and up to 30 one and a half hours.

Annual holidays of six consecutive days were awarded, in addition to six public holidays. In Scotland these were Spring Holiday, day after Spring holiday, Autumn Holiday, New Year's Day, the two days following New Year's day.

Post-Nationalisation

The Gas Council and the Scottish Area Gas Board assumed the obligations with regard to wages and hours of work which had been arrived at previous to nationalisation. Wage rates had been standardised on a national level by the three main agreements covering craftsmen (the Gasfitters' Classification Scheme, the agreement with the Confederation of Shipbuilding and Engineering Unions, and the agreement between the Refractory Users Federation and the A.U.B.T.W.).
The Edinburgh Undertaking was automatically included in all awards covering Category "A" (under nationalisation, designated Provincial Zone "A") undertakings. Following nationalisation, wage increases were granted all round, but it must be remembered that substantial increases (greater in most cases than the post-nationalisation increases) had already been granted under the above agreements.

The wage rates of Granton gasfitters were increased from 2/9½ an hour in 1949 to 2/11d in 1950, to 3/0½ in 1951, and 3/7d in 1952.¹

An increase of 1½d an hour was granted to craftsmen covered by the Confederation of Shipbuilding & Engineering Una. agreement in 1949, a further ½d in 1950, 2d in 1951 and 3d in 1952. The effect of this upon the Edinburgh Undertaking craftsmen was to increase the rates of blacksmiths, brassfinishers, carpenters, chemical plumbers, coppersmiths, electricians, engine-fitters, engine-turners, motor mechanics, moulders, patternmakers, platers, plumbers, riveters, sheet metal workers, welders, and woodcutting machinists from 2/9 to 2/10½ to 3/- to 3/2 to 3/5 respectively. Hammermen were raised from 2/6d to 2/7½ to 2/9 to 2/11d 3/2 in this period; Pipe Fitters from 2/5 to 2/6½ to 2/8 to 2/10 to 3/1; Retort Pipe Fitters from 2/4½ to 2/6 to 2/7½ to 2/9½ to 3/0½; and Drillers, Foundry Trimmers and Furnacemen from 2/4 to 2/5½ to 2/7 to 2/9 to 3/-⁴. All these rates applied to a 44 hour week, with overtime paid at the rate of time-and-a-quarter for the first two hours and time-and-a-half thereafter, except Sundays (for which double time was paid). The effects of these increases upon all undertakings (Metropolitan, "A" and "B") are shown in the following table:

Agreement/

¹ See Page 302 above.
Agreement between the Federation of Gas Employers and the Confederation of Shipbuilding and Engineering Unions

(standard rate of wages per hour, inclusive of war bonus)

<table>
<thead>
<tr>
<th>Designation</th>
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<th>Do. 1 Octr. 1949</th>
<th>Do. 1 Octr. 1950</th>
</tr>
</thead>
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<td>Brassfinisher</td>
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<tr>
<td>Carpenter</td>
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<tr>
<td>Chemical Plumber</td>
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<td></td>
</tr>
<tr>
<td>Coachmaker</td>
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<td></td>
<td></td>
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<tr>
<td>Coach Painter</td>
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<td></td>
</tr>
<tr>
<td>Coppersmith</td>
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<td></td>
<td></td>
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<tr>
<td>Electrician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine-Fitter</td>
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<tr>
<td>Engine-Turner</td>
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<tr>
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<tr>
<td>Welder</td>
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<tr>
<td>Woodwork cutting</td>
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<tr>
<td>Machinist</td>
<td>3/-</td>
<td>2/9</td>
<td>2/8</td>
</tr>
<tr>
<td>Holder Up</td>
<td>2/11</td>
<td>2/8</td>
<td>2/7</td>
</tr>
<tr>
<td>Hammerman (Blacksmith's Striker)</td>
<td>2/ 9</td>
<td>2/6</td>
<td>2/5</td>
</tr>
<tr>
<td>Pipe Fitter</td>
<td>2/ 8</td>
<td>2/5</td>
<td>2/4</td>
</tr>
<tr>
<td>Retort Pipe Fitter</td>
<td>2/ 7</td>
<td>2/4½</td>
<td>2/3½</td>
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<tr>
<td>Driller (machine)</td>
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<tr>
<td>Foundry Trimmer</td>
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<tr>
<td>Furnaceman (Foundry)</td>
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<tr>
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<td>3/1</td>
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<tr>
<td>Machinist</td>
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<td>2/ 9½</td>
<td>2/ 8½</td>
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<td>3/ -</td>
<td>2/ 9</td>
<td>2/ 8</td>
</tr>
<tr>
<td>Driller Doô</td>
<td>3/</td>
<td>2/9</td>
<td>2/8</td>
</tr>
</tbody>
</table>

M.A. = Metropolitan Area
M.A. = Comprising Undertakings where annual Sale of Gas exceeds 500 m. cubic feet.
M.A. = Comprising Undertakings where annual Sale of gas does not exceed 500 m. cubic feet.

As at 1 Octr. 1951
M.A. = A. = B. =
M.A. = A. = B.

As at 1 Octr. 1952
M.A. = A. = B. =
M.A. = A. = B. =

Hours/
Hours of Labour: The hours of labour in a full week exclusive of mealtimes are now 44 for dayworkers and nightworkers, to be worked in 5½ days or 5 nights. For workers employed on rotating or alternating shifts the normal working week consists of six shifts of 8 hours each including half an hour break for meals.

Shift Workers: Shift workers are paid at the rate of time-and-a-fifth for week-day shifts and double time for Sunday shifts.

Night Workers: Workers, other than shift workers, who are employed on night work for not less than three consecutive nights are paid at the rate of time-and-a-fifth for all hours worked and double time for Sunday duty.

Charge Hands: A worker appointed to be a charge hand is whilst so employed paid an allowance of (a) not less than 2d an hour if he is in charge of two to five skilled workers or six to ten semi-skilled or unskilled workers or (b) not less than 3d an hour if he is in charge of six or more skilled workers or eleven or more semi-skilled or unskilled workers, provided that if there is a foreman in charge of the gang, the charge hand is only paid an additional 2d an hour.

Other Classes: By arrangement with individual unions, paviors, plasterers and slaters are paid the same rates as the skilled grades.

Standard hourly rates of Granton bricklayers and masons were increased from 2/10 in 1949 to 2/10½ in 1950 and to 3/2 in 1951. For new construction work (See Page 316) the rates in this period rose from 3/2 to 3/2½ to 3/5½; for repairs and dismantling from 3/3 to 3/3½ to 3/6½ and for chimney work up to forty feet (with increments of one penny for additions of 50, 60, 50, 50, and 50 feet) from 3/2 to 3/2½ to 3/5½.

Bricklayers and masons were placed on the same holidays as gasworkers in 1951 (i.e., two normal working weeks at plain time after the completion of twelve months' service, plus national and local public holidays.)

Craftsmen were given a guaranteed week; they were to be found alternative employment at their own rate in the event of outside working being impracticable. The remainder of the agreement entered into by the Gas Council merely reiterated the clauses of the former agreement between the Refractory Users' Federation and the A.U.B.T.W. One additional clause was, however, added in the 1951 agreement. This provided that "...where existing hourly rates are higher than those set out above, there shall be no reduction of the existing rates so far as they affect skilled tradesmen in the service of the Gas Industry on the 30th May 1949 provided that if at any time hereafter a general reduction of the hourly rate set out above (i.e., 3/2 for "Provincial Zone A" Undertakings) takes/
takes place ... the existing hourly rates shall be reduced by the same amount as the general reduction of rates. Provided also that if at any time hereafter a general increase in the hourly rate set out above takes place, the existing rate shall merge in the general increase, the intention being that the benefit of the margin of existing rates over the rates set out above shall be maintained until such time as those rates shall reach the level of existing rates."

As the works extended the number of foremen increased. Foremen were appointed to the fitting shop (with the exception of free house, coal and gas), the Running Plant (with the same exception), and a Pipe squad foreman and Purifier foreman were appointed. The yard foreman in charge of general labour, whose post dated from the opening of Grasstanes, also received a free house, coal and gas. In 1925 the post of Electrician Charge Hand was established. The rate for this post was regulated by craftsmen's awards, as was that of the Running Plant foreman, but the others came within the scope of the workers' awards.

Hour rates required continuous adjustment to preserve the differentials between foremen and workers in the various employments. In 1923, for instance, the case of the Running Plant foreman was discussed by the Edinburgh Tyne Council. At that time he was receiving 66/6d plus 31/2d bonus per week, in addition to free house, coal and gas. The engineers had received an increase from 1/3d per hour to 1/3d, making a rise of 3/6d on a 47 hour week. The Gas Committee recommended an increase of 5/- a week for this foreman, but the Council accepted the recommendation of the Wages and Salaries Sub-Committee and reduced the award to 3/6d per week.

In 1931 the Refuse House foreman were resisting a cut. The Scottish Organiser, National Union of General and Municipal Workers, claimed successfully on their behalf that as they had been paid on a fixed scale the previous year they should not be subject to the reduction announced by the Federation of Gas Employers in December 1931 (60 1/2d an hour for day workers and 4d a shift for the shiftworkers).

The foremen received the various war bonuses as they were announced, during the War, 1939-45, but they had to make a claim for any increase which had been granted in the basic rates of their men. Labourers employed on overtime work were awarded an increase from 1/3d to 3d an hour over the ordinary labourer's rate, with effect from December 1937, and the same for the Purifier foremen was increased on application. Previously 1/2d at 7 1/2d per week, rising to 1/6d at 5 1/2d (plus an bonus of 1/2d) when they were called for duty.
Foremen and Chargehands

At the opening of the Granton works Retort-House foremen received 48/- per week. This weekly pay covered all Sunday time, and overtime when required to work late. In 1914 their rate of wages was fixed at 25% above the rate for stokers, and assistant retort-house foremen were established with a rate 15% above stokers. In 1930 the foremen were put on a new scale of 90/- per week rising to 100/-, rising by biennial increments of 2/- per week. In 1934 this was altered to four annual increments of 2/- and one biennial increase of 2/6d.

As the works extended the number of foremen increased. Foremen were appointed to the Fitting shop (with the emoluments of free house, coal and gas), the Running Plant (with the same emoluments), and a Pipe squad foreman and Purifier foreman were appointed. The Yard Foreman in charge of general labour, whose post dated from the opening of Granton, also received a free house, coal and gas. In 1925 the post of Electrician Charge Hand was established. The rate for this post was regulated by craftsmens' awards, as was that of the Running Plant Foreman, but the others came within the scope of gasworkers' awards.

Wage rates required continuous adjustment to preserve the differentials between foreman and worker in the various employments. In 1923, for instance, the case of the Running Plant foreman was discussed by the Edinburgh Town Council. At that time he was receiving 66/6d plus 31/2½d bonus per week, in addition to free house, coal and gas. The engineers had received an increase from 1/2½d per hour to 1/3½d, making a rise of 5/4d on a 47 hour week. The Gas Committee recommended an increase of 5/- a week for this foreman, but the Council accepted the recommendation of the Wages and Salaries Sub-Committee and reduced the award to 3/6d per week.

In 1931 the Retort-House foremen were resisting a cut. The Scottish Organiser, National Union of General and Municipal Workers, claimed successfully on their behalf that as they had been placed on a fixed scale the previous year they should not be subject to the reduction announced by the Federation of Gas Employers in December 1931 (to be 3½d an hour for day workers and 4d a shift for the shiftworkers).

The foremen received the various war bonuses as they were announced, during the War, 1939-45, but they had to make a claim for any increases which had been granted in the basic rates of their men. Labourers employed on purifier work were awarded an increase from 1.23d to 3d an hour over the ordinary labourer's rate, with effect from November 1943, and the scale for the Purifier Foreman was increased on application. Previously fixed at 70/- per week rising by annual increments of 2/6d to 80/- (plus war bonus of 19/5d in 1943) they were now fixed/
fixed at 77/- rising to 87/-, plus war bonus.

In March 1944 the Retort-House foremen and assistant foremen at Granton applied for an increase of 15/- per week and an increase in holidays to 21 shifts. They were then working a 7 day week of 56 hours, with no days off except annual holidays. The Secretary of the F.G.E. advised the Gas Sub-Committee that it was important to maintain the prewar difference in wages between the foreman and the class of worker supervised. Where the nature of duties required exceptional overtime (i.e., overtime worked above the overtime worked prewar), the F.G.E. suggested that 2/6d an hour should be awarded during the week, and 2/9d on Sundays. Where responsibilities had changed, the basic rate of wage should be adjusted by the management of the individual undertaking; holidays for foremen was also a matter for individual discretion. The application of the retort-house foremen led to a reconsideration of the wages of all the foremen with a view to co-ordinating their pay.

The grievance of the retort-house foremen and assistant foremen was that if they were employed at their trade as engineers the present rate would amount to £6:10:4½d for a week of 56 hours, whereas their maximum as foremen was 100/- plus war bonus (then amounting to 24/8½d) and few of them had in fact reached the maximum. The disparity was revealed when foremen went on holiday. The Gas Committee had to employ an engineer and pay him at a higher rate than the foreman he was relieving. Wages paid at this time to foremen in other undertakings were: Aberdeen 98/- and Dundee 108/- (basic rates); Glasgow 131/6d (all-in rate for a six-shift week).

The Gas Sub-Committee offered an additional 10/- per week to retort-house foremen and assistant foremen and an increase in holidays to 20 shifts (compared with 19 and 17 shifts enjoyed up to that date by foremen and assistants respectively). The question of overtime was delayed for a further report. The City Chamberlain, on 23rd June, 1944, stated that there should be no hourly overtime payment for foremen, but that periodic payments of an appropriate amount should be granted. This advice was accepted.

The Fitting Shop and Running Plant foremen at this time were on a scale rising from 75/- to 100/-, plus 14/- war bonus, plus emoluments (house, coal and gas), and the Residual Works Foreman was on a flat wage of 85/1½d plus 19/5d bonus. The Electrical Charge Hand was on the scale 90/- to 100/- plus 14/- bonus. In every case the foreman's wages were lagging behind increases granted to workers, although they were in receipt of the flat war bonuses. The Fitting shop foreman's wages scale had been fixed in 1930, and since that date the wages of engineers had risen from 63/8d to 95/9d (an increase of 32/1d).
Running Plant foreman was in the same position. The Residual Works Foreman's wage had kept more closely to the prewar difference, but against this the expansion of his department under wartime demands, and the construction of a new Toluene Plant, had added greatly to his responsibilities and the changed nature of his work. The wages of the Electrical Charge Hand had been last fixed in 1935 with no provision for adjustment. Since 1935 the wages of electricians had risen by 21/6/2d per week.

The Gas Sub-Committee awarded the Residual Works Foreman an additional 10/- per week from 15th March, 1944. It rejected, however, the proposals of the engineers to revise the entire system by which foreman's wages were determined, and no action was taken with regard to the wages of the other foremen and changehands.

The introduction of the six-shift week on 28th April, 1946, led to a revision of the wages of retort-house foremen and assistant foremen (who had hitherto worked seven shifts). By this time they were earning a total at minimum of £7:12:2½d (100/- plus 10/- plus the war bonus of 42/2½d) and £7:2:2½d (90/- plus 10/- plus 42/2½d) respectively. Stokers were receiving £6:5:2½d (flat 83/- plus 42/2½d). Under the new agreement, stokers lost one half shift’s wages when the six shift week was introduced, bringing their wage down to £5:16:10½d (77/5¼d plus 39/5d). The Gas Sub-Committee therefore reduced the wages of foremen and assistant foremen by 9/- per week.

In February, 1947, the Electrical Charge Hands applied for an increase, in view of increased responsibility. He reminded the management that he did not receive overtime pay. The Engineers suggested an extra 15/-, but the Gas Sub-Committee decided upon 10/- to bring his wage (with existing war bonus) to £7 weekly.

The foremen and charge hands applied, in April 1947, for an increase in holidays to three weeks (they were receiving 2 weeks 6 days and 2 weeks 5 days respectively, while shift foremen and assistants were receiving 20 shifts). This claim was made because the men had received an increase in holidays, and the foremen had traditionally enjoyed one week longer than the men. The Gas Sub-Committee decided to seek the advice of the F.G.E. They were informed that this was a matter for each individual undertaking to settle locally, and no action was taken.

The reduction of the working week to 44 hours, in April 1947, and the payment of 9d per shift, led to further revision, and in February 1948 the Salaries Sub-Committee granted weekly increases to the following categories: retort-house foremen and assistant foremen (at maximum) 1/2½d; Running Plant foreman/
foreman 15/-; Fitting Shop foreman 10/-; Pipe Squad Foreman 16/-; Purifier foreman 10/-; Yard foreman 10/-. The increase of 17/- to the Electrical Charge Hands was instead of suggested free house, coal and gas, and the Sub-Committee decided that when other posts carrying these emoluments fell vacant, each payment should be given instead. The post of Electrical Charge Hand was re-designated Electrician Foreman.

Changes in the wages of foremen between 1947 and 1952 are shown in a table at the end of this Section.

Post Nationalisation

In November 1950 an agreement was reached with regard to "intermediate grades" employed in the Gas Industry, and this agreement covered various categories of foremen and chargehands.

The usual division into Metropolitan, Provincial "A" and Provincial "B" Undertakings was made (each Area Joint Standing Committee for Intermediate Grades to determine into which of these categories an undertaking should come.) Eleven grades of pay were established, each grade providing for annual progression from the minimum to a maximum, and the Area Board was to determine into which grade an employee should come and whether the employee should come under "Conditions of Service:I" or "Conditions of Service:II". These two sets of conditions applied to greater and lesser responsibility; whether the employee should receive 27 normal working days' holiday annually (inclusive of national and local holidays) or 24 days; whether he received a three-monthly bonus or overtime.

The scales of pay provided that the Metropolitan salary should be Provincial "A" plus £30, while Provincial "B" should be Provincial "A" less £15. They were to apply to all make employees of 21 years and over, and were to be inclusive of bonus.

The following rates were established:-

<table>
<thead>
<tr>
<th>Grade</th>
<th>Metropolitan</th>
<th>Provincial &quot;A&quot;</th>
<th>Provincial &quot;B&quot;</th>
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<tr>
<td></td>
<td>375</td>
<td>345</td>
<td>330</td>
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</tbody>
</table>

The usual division into categories was made (each Area Joint Standing Committee for Intermediate Grades to determine into which of these categories an undertaking should come.) Each employee was provided with work and pay conditions suitable for the duties of his post, whether he was receiving a higher rate (as would be in accordance with his progression to a higher rate) or remaining on his existing salary scale, and was protected against the risk of his position being made unsuitable for him. Any employee who was not receiving a higher rate (as would be in accordance with his progression to a higher rate) the existing salary scale was preserved. The
<table>
<thead>
<tr>
<th>Grade</th>
<th>Metropolitan</th>
<th>Provincial &quot;A&quot;</th>
<th>Provincial &quot;B&quot;</th>
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</table>

These increments apply automatically (within each grade) on 1st January in each year (or the beginning of the pay-week nearest thereto) until the maximum of the Grade is reached, provided that work and conduct are satisfactory.

The usual clauses were inserted in the 1950 agreement protecting those employees who enjoyed better conditions. Where an employee, at the date of this Agreement, was receiving a higher rate (or would in accordance with his grading have progressed to a higher rate) the existing salary scale was preserved. The same/
same rule applied to conditions of service, with one additional provision. This was that where an individual employee enjoyed conditions of service better than those set out in the Agreement, and also better than those laid down at this time for Clerical, Administrative, Professional and Technical staffs by their National Joint Council, he should revert to a level not higher than that of the Clerical, Administrative, Professional and Technical staffs.

At the Granton undertaking the foremen were allocated grades ranging from 4 to 9 according to degree of responsibility. These grades were, of course, those applicable to "Provincial "A" Undertakings".

By October 1952 the Scottish Gas Board had discharged its responsibility to assign appropriate scales of remuneration and conditions of service to those employees concerned, on the basis of individual duties. Individuals had the right to appeal against the gradings allocated. The task of grading foremen was particularly complex and exacting. The Board found that pre-vesting pay for approximately similar duties varied widely throughout Scottish undertakings, and that the designation "foreman" had often been loosely used. In the case of the Granton undertaking, however, the duties had been fairly accurately defined, and only slight changes of nomenclature were necessary. It was comparatively easy in this undertaking to put the foremen upon a proximate scale; the difficulties of the Board arose particularly with small private undertakings.

---

### Changes in the Wages of Foremen employed at Granton, 1947-1952

<table>
<thead>
<tr>
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</thead>
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<tr>
<td>1. Retort-House Foreman</td>
<td>103/-9½</td>
<td>54/-162/-9½</td>
<td>105/-110/-</td>
<td>105/-110/-</td>
<td>54/-164/-</td>
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</tr>
<tr>
<td>2. Asst. Retort-House Foreman</td>
<td>93/-0½</td>
<td>54/-152/-9½</td>
<td>95/-100/-</td>
<td>54/-154/-</td>
<td>95/-154/-</td>
<td></td>
</tr>
<tr>
<td>3. Running Plant Foreman*</td>
<td>75/-</td>
<td>54/-137/-6</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
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</tr>
<tr>
<td>4. Fitting Shop Foreman*</td>
<td>93/-01/4</td>
<td>54/-152/-9½</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
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<tr>
<td>5. Electrician Charge Hand+</td>
<td>75/-</td>
<td>54/-137/-6</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
<td></td>
</tr>
<tr>
<td>6. Pipe Squad Foreman *</td>
<td>93/-01/4</td>
<td>54/-152/-9½</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
<td></td>
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<tr>
<td>7. Purifier Foreman</td>
<td>75/-</td>
<td>54/-137/-6</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
<td></td>
</tr>
<tr>
<td>8. Yard Foreman *</td>
<td>93/-01/4</td>
<td>54/-152/-9½</td>
<td>105/-115/-</td>
<td>37/-6 152/-</td>
<td>105/-115/-</td>
<td></td>
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</tbody>
</table>

1. Annual increments of 5/-

The New Designation

<table>
<thead>
<tr>
<th>Designation</th>
<th>Consolidated Wage as at 27th February, 1952</th>
<th>Emoluments*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shift Foreman</td>
<td>188/-2 rising to 199/-5</td>
<td>Free House</td>
</tr>
<tr>
<td>2. Asst. Shift Foreman</td>
<td>166/-10</td>
<td>184/-1</td>
</tr>
<tr>
<td>3. Plant Engineer Foreman</td>
<td>166/-10</td>
<td>Free House</td>
</tr>
<tr>
<td>4. Fitting Shop Engineer Foreman</td>
<td>157/-3</td>
<td>174/-6</td>
</tr>
<tr>
<td>7. Yard Foreman</td>
<td>141/-11</td>
<td>159/-2</td>
</tr>
</tbody>
</table>

*Emoluments in respect of house, coal and gas which were granted to foremen prior to vesting date continued after nationalisation, and are additional to wages.

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1. Minutes of the Public Utilities Committee (Gas Sub-Committee) Edinburgh Corporation. The Secretary, Scottish Gas Board.
Clerical, Administrative and Professional Staff

The salaried staff of the Edinburgh undertaking received haphazard increases in their salaries, by means of individual petitions to the Commissioners, in the early days of the industry. In October, 1894, however, it was decided that individual applications for increases of salary would not be received, unless under very exceptional circumstances. Instead, during the three months October to December 1896, and every fifth year thereafter, the Engineer and Collector should review the duties and remuneration of the salaried staff in their various departments, and give a report to the Treasurer of whatever changes (whether increase or decrease) they considered requisite. The Treasurer should then prepare a report on the basis of these submissions, including a review of his own department, and submit them to the Commissioners in January 1897 and every fifth year thereafter. This quinquennial cycle was not, however, meticulously followed, and various "interim" reports were submitted from time to time.

In 1910, for instance, Herring drew attention to the disparity in holidays allowed to members of the various departments. Treasurer's and collector's clerical staff (working at Waterloo Place) were enjoying three weeks' consecutive holidays, and six public holidays. Surveyors (meter readers) got two weeks consecutive holidays and six public holidays. The Granton clerical staff got two weeks and three public holidays. The General Manager's clerical staff received two weeks and six public holidays. (At this time shiftworkers were receiving nine consecutive days holiday in the summer months, and dayworkers six consecutive days and three public holidays).

The Collector (Mr. Gibbs) hastened to submit a report of his own, pointing out that whatever the disparities, the system had "worked smoothly for half a century." Hours of work at this time were - for the Granton clerical staff, 9 a.m. until the workmen's train at 4.57 p.m. with an hour for lunch; for the clerical staff working with the main laying department, 6 a.m. to 5 p.m. with one hour for breakfast and one hour to lunch; General Manager's staff, 9.30 a.m. to 5 p.m. with one hour for lunch. In all cases work ceased at 1 p.m. on Saturday. No overtime was paid for the stocktaking and preparation for annual accounts. The Clerks at Waterloo Place (open for the collection of money from 10 a.m. to 4 p.m.) worked from 9.30 a.m. to 5 p.m. with an hour for lunch, in the months October to June, and 9.30 a.m. to 4 p.m. in July, August and September. Herring suggested that the Treasurer's and Collector's clerical staff should work an extra hour daily during July, August and September and their holidays should be reduced to two weeks plus public holidays. "In concluding this interim report," declared Herring, "I have endeavoured to keep prominently in/
in view ... the efficient administration of the Commissioner's affairs and the economical interest of the undertaking, and that of the gas consuming public as being of primary importance." The recommendations were accepted. Clerks at this time were earning 41/9d weekly. On 7th May 1912 the clerks concerned petitioned the Commissioners for the return of their three weeks holiday (Herring by this time had retired) and the Commissioners granted the extra week to those clerks with over three years service.

In July 1912 the meter readers asked to receive their weekly maximum (35/-) in eight years instead of eleven years, and this was granted.

During the war, 1914-18, it was the meter readers who were the first to establish their claim to a war bonus on similar terms to manual workers. The award of Sheriff Louttit Laing in January 1917 granted meter readers an extra 1/6d per week. The N.U.C.W. tried unsuccessfully to extend the award to seven consumers' ledger clerks who were members of the N.U.C.W., and to the temporary meter readers. In the arbitration proceedings which ensued, in which an additional 5/- was granted to N.U.C.W. members, Sir Richard Lodge specifically excluded the consumers' ledger clerks. A ballot was held by the staff of the Treasurer's department, and it was decided by the General Office clerks and outdoor collectors, and by fourteen of the twenty-one consumers' ledger clerks, that they preferred the Commissioners themselves to decide questions of salaries and bonuses. The seven consumers' ledger clerks reaffirmed their desire to be included in awards to the N.U.C.W. Further arbitration proceedings in November 1917 again excluded these clerks. In February 1918 the Commissioners granted a war bonus of 5/- weekly to males, and 3/- to females, on the permanent staffs of the Engineer and Treasurer. Temporary clerks could be awarded the bonus at the discretion of the Engineer and Treasurer. In April the Committee on Production reiterated the exclusion of Consumers' Ledger clerks, regardless of their membership of the N.U.C.W. The Commissioners continued to increase the war bonus, however. In May, clerical staffs received increases of the following amounts - male employees earning £200 per annum and under, £9 (making a total of £44); over £200 and under £350, £9 (making £38); female employees, £4:10:- (making £27); and to apprentices, £4:10:- (making £21). In November these four categories received further increases, bringing their total war bonuses respectively to £57, £51, £33:10:-, and £27.

In October 1919 the Engineer reported that most of the members of his clerical staff were now affiliated to the National Association of Local Government Officers, which was demanding that the existing war bonuses should be converted into permanent pay, and that new bonuses of £30 be granted to those under/
under £500 per annum. It was requested that "at an early date the pay of all employees concerned in this application be revised with a view to establishing on a permanent postwar basis adequate scales of remuneration commensurate with the growing responsibility of local government officers." In view of N.A.L.G.O's request, and the impending Bill incorporating the Burgh of Leith with the City of Edinburgh, it was decided in 1920 to bring salaried employees into line with Edinburgh Corporation.

The meter readers requested to be put under the zoning and grading scheme when it was introduced, but the Gas Sub-Committee continued to regulate their pay and conditions. In June 1921 the meter readers' maximum was increased from 35/- to 40/-. Hitherto they had received 24/- weekly on appointment, plus 22/10 bonus (total 46/10) rising by annual increments of 2/- in the first year and 1/- thereafter to a maximum of 35/- plus 24/3 (total 59/3). The increments were granted only at the discretion of the Engineer and Manager. In July 1922 the meter readers were admitted to the provisions of the zoning and grading scheme.

Timekeepers and weighers, who occupied a somewhat ambiguous place in the hierarchy of the Edinburgh undertaking, were also admitted to the zoning and grading scheme, but their wages were too high to qualify them any increase. They did, however, lose their sick allowance under the same provisions whereby gasworkers entering the scheme gave up this benefit in exchange for the increase in wages. This anomaly was rectified in September 1924, when the sick allowance was restored to the timekeepers and weighers. The weighers had been treated as local government officers, and in recognition of this they were placed on a scale of 55/8d per week, rising by biennial increments of 2/6d to a maximum of 67/6d. In 1933 the increments were made annual. At the same time, it was decided that weighers (at their own request) should be treated as gasworkers and represented in wage claims by the N.U.G.M.W. instead of N.A.L.G.O. Increases during the war brought the scales of timekeepers and weighers to 75/- - 85/- and 70/- - 80/- respectively. By 1946 they were earning a total at minimum of £5:17:2½d and £5:12:2½d (including a war bonus in each case of 42/2½d).

Post-Nationalisation

On 28th June 1950 new national salary scales were introduced for Clerical, Administrative and Technical staffs (male and female).

Clerical staffs were divided into four grades as under:

Grade/
Grade "A" - Rate for Age

Operations requiring small measure of responsibility, working to a limited number of well-defined rules; tasks mostly checked or closely supervised.

<table>
<thead>
<tr>
<th>Age</th>
<th>Metropolitan Males</th>
<th>Metropolitan Females</th>
<th>Provincial &quot;A&quot; Males</th>
<th>Provincial &quot;A&quot; Females</th>
<th>Provincial &quot;B&quot; Males</th>
<th>Provincial &quot;B&quot; Females</th>
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</thead>
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<tr>
<td>16</td>
<td>£165</td>
<td>£132</td>
<td>£155</td>
<td>£108</td>
<td>£120</td>
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<td>176</td>
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<td>256</td>
<td>290</td>
<td>232</td>
<td>275</td>
<td>220</td>
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</tbody>
</table>

At a meeting of the N.J.C. for Gas Staffs on 8th May 1951, increases of £20 p.a. were granted to employees aged 16, 17, 18, 19 and 20; increases of £25 p.a. to those aged 21 and 22; an increase of £30 p.a. to the 23 age group; and an increase of £35 p.a. to those aged 24 and 25.

Grade "B"

Responsibilities greater than Grade "A" work, but still duties mainly of a routine character.

<table>
<thead>
<tr>
<th>Metropolitan Males</th>
<th>Metropolitan Females</th>
<th>Provincial &quot;A&quot; Males</th>
<th>Provincial &quot;A&quot; Females</th>
<th>Provincial &quot;B&quot; Males</th>
<th>Provincial &quot;B&quot; Females</th>
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<tr>
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<td>332</td>
<td>385</td>
<td>308</td>
<td>370</td>
<td>296</td>
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</table>

Grade "C"

Independent arrangement of work calling for the exercise of initiative; little supervision needed; daily routine varying.

<table>
<thead>
<tr>
<th>Metropolitan Males</th>
<th>Metropolitan Females</th>
<th>Provincial &quot;A&quot; Males</th>
<th>Provincial &quot;A&quot; Females</th>
<th>Provincial &quot;B&quot; Males</th>
<th>Provincial &quot;B&quot; Females</th>
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</tbody>
</table>

Grade/
Grade "D"

More important clerical and minor administrative work with a measure of control over a sequence of jobs and over groups of staff; non-routine queries; work requiring special knowledge of individual responsibility without supervision.

| Metropolitan. | Provincial "A" | Provincial "B"
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
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<td>Males Females</td>
<td>Males Females</td>
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<td>485 388</td>
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<tr>
<td>500 400</td>
<td>470 376</td>
<td>455 364</td>
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<td>470 376</td>
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<tr>
<td>530 425</td>
<td>500 400</td>
<td>485 388</td>
</tr>
</tbody>
</table>

On 8th May 1951, all steps in Grades "B", "C" and "D" received an increase of £40 p.a.

New scales were established for Administrative, Profession and Technical staffs in June 1950. These staffs embraced employees qualified by examination or experience, engaged on professional or technical work in engineering, technical, scientific, legal or accounting departments; also employees engaged on higher clerical and administrative work not covered by the proposed male and female salary scales (clerical); and certain subordinate employees engaged on technical work. The following grades were established:

Grade I - Rate for Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Metropolitan. Males Females</th>
<th>Provincial &quot;A&quot; Males Females</th>
<th>Provincial &quot;B&quot; Males Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>£165 £132</td>
<td>£135 £108</td>
<td>£120 £ 96</td>
</tr>
<tr>
<td>17</td>
<td>170 136</td>
<td>140 112</td>
<td>125 100</td>
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<td>18</td>
<td>190 152</td>
<td>160 128</td>
<td>145 116</td>
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<tr>
<td>19</td>
<td>210 168</td>
<td>180 144</td>
<td>165 132</td>
</tr>
<tr>
<td>20</td>
<td>230 184</td>
<td>200 160</td>
<td>185 148</td>
</tr>
</tbody>
</table>

On 8th May 1951, all steps received an increase of £20 p.a.

Grade 2

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan. Males Females</th>
<th>Provincial &quot;A&quot; Males Females</th>
<th>Provincial &quot;B&quot; Males Females</th>
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</tr>
<tr>
<td>295 236</td>
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<td>310 248</td>
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<td>295 236</td>
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<td>355 284</td>
<td>325 260</td>
<td>310 248</td>
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<td>370 296</td>
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<tr>
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On 8th May, 1951, Grades 2, 3 and 4 received increases as follows:

- **Steps 1 and 2** an increase of £25 p.a.
- **Steps 3 and 4 and 5** an increase of £30 p.a.
- **Remainder of steps** an increase of £40 p.a.

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On 8th May 1951, all steps in Grades 5 and 6 received an increase of £40 p.a.

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On 8th May 1951 all steps in Grades 7, 8, 9, 10, 11 and 12 received an increase of £50 p.a.

The normal working week for all Clerical, Administrative, Professional and Technical staffs in the Gas Industry was, in June 1950, standardised at 38 hours, except for individuals operating under special conditions of service at that time. Under this 1950 Agreement, holidays were fixed as follows:

**ANNUAL HOLIDAYS**

(i) Staff employees with under 12 months' service as at the 1st June in any year shall be granted one day's annual holiday for each complete calendar month of continuous service, plus such Bank, Statutory and Local Holidays as fall within their period of service, provided however that the total holidays shall not exceed two normal working weeks plus six normal working days.

(ii) Staff employees of under 21 years of age, but with 12 months' continuous service or over, as at the 1st June in any one year, shall be granted a total of two normal working weeks' holiday annually.

(iii) Staff employees who have reached the age of 21 years with 12 months' continuous service or over, as at the 1st June in any one year, shall be granted a total of three normal working weeks' holiday annually.

(iv) Staff employees in A.P.T. Grades 10 and above with 12 months' continuous service or over, as at the 1st June in any one year and in receipt of a salary of up to £770 per annum (up to £800 per annum in the Metropolitan Area), shall be granted a total of three normal working weeks, plus three normal working days' holiday annually.
BANK, STATUTORY AND LOCAL HOLIDAYS

In addition to the holidays set out in A (ii), (iii) and (iv) above, staff employees shall be granted 6 Bank and Statutory Holidays plus 3 Local Holidays (each of one day) in each year.

GENERAL

(i) The National Holiday Agreement set out above shall supersede all present holiday arrangements with no recognition of "Better Conditions".

(ii) All holidays shall be taken at the discretion of the Management.

(iii) Saturday shall be regarded as a whole working day.

The task of assigning salary grades to staff employees of the Scottish Gas Board proved to be one of considerable magnitude. The Board was keenly conscious of the fact that every decision taken in this matter was likely to influence to a material degree the salary structure of the Gas Industry in Scotland for many years to come. The Board therefore announced that there would be an examination in detail of the duties of each staff employee individually. These duties would be evaluated in terms of salary on the basis of the responsibilities of each appointment and in relation to posts of a similar nature throughout all the Board's undertakings. As there were two hundred undertakings to consider - widely scattered and with conditions of service very far from uniform - the Board made slow progress in implementing the nationally agreed scales. Its justification for this delay was the "importance of ensuring that assessments were just and fair to both employee and employer" but it was an excuse which the staffs were not disposed to accept. In reply to their demand for more prompt action the Scottish Gas Board suggested that an interim grading be accorded to the employees to be based generally on the existing salaries of individuals, and to be without prejudice to a final grading as assessed after evaluation of the duties attaching to each post. The Staffs' side refused to accept this offer; they considered that it was avoiding the responsibilities laid upon the Board to implement the nationally negotiated scales. They assured the Board that they did not underestimate the extent of the task involved, but reiterated that in their view it was necessary that the grading/  

1. Employees have the right to appeal against the salary grade assigned to them. The procedure adopted in those appeals - and the part played by N.A.L.G.O are described in Chapter IV Page 355.

grading be completed as quickly as possible. Disquiet was allayed to some extent by the Board's announcement that gradings would be implemented with retrospective effect to 1st April 1950. By October 1952 most staff employees had been allotted grades. The new gradings of the majority of the staff were roughly comparable to the salaries or salary scales which they enjoyed prior to vesting date. Some employees were accorded gradings which were in excess of their pre-vesting remuneration, while others were assessed on grades lower than pre-vesting scales or salaries. These latter employees did not suffer financially, however; they were accorded "personal better conditions" and were either transferred to scales which were no less favourable than their pre-vesting scales, or were left in receipt of pre-vesting salaries. The reductions will only be felt by successors in these appointments.

The National Agreement of June, 1950, while prescribing holiday and sick pay conditions which on the whole were more favourable (and in the case of many former private undertakings substantially more favourable) than those which staff employees enjoyed prior to vesting date, made no provisions for payment for overtime. Such payments had been accorded to a significant proportion of ex-Local Authority staff employees in Scotland prior to vesting date. The Employers' Side of the N.J.G. undertook outwith that National Agreement that Area Boards would give sympathetic consideration to the payment of bonuses for prolonged, exceptional and recurring overtime. This arrangement, however, did not prove successful in Scotland. The staffs' representatives on the Scottish Area Joint Council argues that staffs should know precisely on what basis they were to be remunerated for such overtime as they were required to work. The Scottish Gas Board's rejoinder was that to reduce the assessment of these bonuses to a precise mathematical formula would be contrary to both the letter and spirit of the National Agreement.

There was also disagreement between the Board and the staff employees over the amount of the subsistence allowance payable when working away from the normal place of employment. The Board finally agreed to revise the scale, taking into account proposals which had been made by the Staffs' side of the Area Joint Council, as well as arrangements obtaining in other industries and local authorities. The Board emphasised, however, that their decision to raise the scale was taken unilaterally, as they did not regard subsistence allowances as falling within the scope of negotiation.
CHAPTER IV

Negotiations and Negotiating Machinery.

Pay and conditions of work were, in the early days of the undertaking, the subject of petitions submitted directly by the workers concerned to the Engineer and Manager who would frequently write to managers in other Scottish (and perhaps English) gasworks, requesting details of the remuneration and conditions of men engaged on similar work. He would then submit a report to the Commissioners. The fact that workers in Dundee or Aberdeen were receiving higher rates or better conditions did not mean that similar concessions would be granted to the Edinburgh men, but it might be taken into consideration. Of more importance to the Commissioners was the estimated cost, to the undertaking of any concession and its effect upon the price of gas to the public of Edinburgh. This was calculated and submitted by the Engineer and Manager, usually accompanied by a list of benefits enjoyed by the men which they had omitted to take into account when submitting their claim.

Applications from tradesmen were, from the earliest days, submitted through the Edinburgh branch of their union; the blacksmiths appealed through the Associated Blacksmiths and Ironmongers' Society, the bricklayers through the Operative Builders Society, the fitters through the Amalgamated Society of Engineers, and the joiners through the Amalgamated Society of Carpenters and Joiners. Their main demands, 1900-1914, were for the payment by the Commissioners of the standard rate, but this was usually withheld on the grounds that they received paid holidays, free travelling, sick pay and superannuation - none of which was enjoyed by craftsmen engaged on seasonal work in Edinburgh and Leith. The practice was to pay ¾d an hour below the rate.

The National Union of Corporation Workers became active on behalf of the general workers (and some skilled workers) just before the Great War. In July 1913 it submitted a demand for an increase in pay all round of ¾d an hour, and for the payment of the standard rate to tradesmen. Both these demands were rejected.

The retort-house workers, who in previous years had sent several delegations to the Commissioners, were in 1915 accompanied by the chairman and secretary of the Edinburgh Branch of the N.U.C.W., and this union represented the retort-house workers thereafter.

In 1916 the N.U.C.W., while putting forward a claim for ¾d an hour, asked that an agreement should be drawn up between themselves and the Commissioners.

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1. See Chapter III - Wages, Earnings and Hours of Work. Pages 303-304
to establish "rules for the regulation of trade relations." This was considered among the union's other claims by Sheriff Louttit Laing, but in his award of 25th January 1917, he decided "that consideration of the demand for a working agreement between the said Commissioners and the said Union shall be postponed until after termination of the war."

Some members of the clerical staff were members of the N.U.C.W. but they were expressly excluded from the arbitration awards, and the majority of the clerks decided by ballot, in 1917, that they preferred the Commissioners to decide questions of pay, conditions, etc., without union intervention.

The Engineer and Manager took most of the burden of representing the management side. It was his duty to examine the validity of the claims and present his view upon them to the Commissioners. The lack of past agreements or suitable criteria made his task a formidable one, as decisions were usually ad hoc. In 1918, he complained to the Commissioners that since the beginning of the war he had endured "considerable extra strain. Government orders ... and labour problems have been perpetually in the foreground entailing much anxiety and consideration, involving the preparation of exhaustive reports and statements, as well as a vast amount of correspondence with the N.U.C.W., with various trade societies, and Government officials." It may be noted that Mr. Masterton, whose interest to us lies in his handling of industrial relations, was also concerned with mechanical and structural engineering projects in his works, the construction of chemical process plant, supervision of daily operations, the laying of main pipes, the sale of gas and by-products at economic prices, and the compilation of daily, weekly and monthly returns. It is hardly surprising that he occasionally lacked tact and suavity.

Mr. Masterton's complaint that problems of industrial relations were occupying an ever-increasing amount of his time was an indication of the impact on the industrial undertaking of the developments which took place at the national level during the war.

Among these national developments the most important was the introduction of compulsory arbitration. On 4th February 1915 the Government appointed a Committee of Production under the chairmanship of the Chief Industrial Commissioner, Sir George Askwith. The other members were Sir Francis Hopwood (representing the Admiralty) and Sir George Gibb (representing the War Office). The Committee was required to investigate and report on the best means of ensuring that "the productive power of the employees in engineering and ship-building establishments working for government purposes shall be made fully available so as to meet the needs of the nation in the present emergency." In their second interim/
interim report, issued on 20th February, 1915, they advocated that "during the present crisis, employers and workmen should under no circumstances allow their differences to result in a stoppage of work ... In the event of differences arising which fail to be settled by the parties directly concerned or by their representatives, or under any existing agreements, the matter shall be referred to an impartial tribunal nominated by His Majesty's Government for immediate investigation and report to the Government with a view to settlement."¹ The Government adopted this recommendation and extended the Committee's terms of reference to enable it to act as the suggested tribunal. The Committee of Production continued to act as an arbitration tribunal throughout the war, but its awards did not enjoy legal force until the passing of the Munitions of War Act² on 2nd July 1915. This Act provided for the settlement of differences with regard to rates of wages, hours of work or otherwise as to terms or conditions of or affecting employment on the manufacture or repair of arms, ammunition, ships, vehicles, aircraft, or any other articles required for use in war or, of the metals, machines or tools required for that manufacture or repair. The Act was thus limited in its immediate application to munitions work but power was given to extend it by proclamation to "any work of any description." Differences which the parties failed to settle might be reported by either of them to the Board of Trade, and the Board was then required to take any steps expedient to promote a settlement. If the Board thought fit the difference could be referred for settlement to one of three tribunals: the Committee on Production; a single arbitrator agreed upon by the parties or appointed by the Board of Trade; or an ad hoc Court of Arbitration as appointed under the terms of the Conciliation Act of 1908. The award of the tribunal selected became binding on employer and employed and failure to comply therewith was punishable by a fine not exceeding £5 for each day of the contravention and in the case of a guilty employer, for each man in respect of whom the contravention took place.

The scope of the Act was extended in the following year³ to include production less directly connected with the conduct of the war. Although the Government had previously enjoyed powers, as we have seen, to extend the scope of the Act by proclamation, it had used these powers sparingly, and, in the case of the South Wales coal miners, with little success. Henceforth, activities such/

². Munitions of War Act, 5 & 6 Geo.V. c. 54.
such as the supply of heat and light, and the erection of buildings, machinery and plant required for this supply were included in the definition of "munitions work."

In May 1917 the Committee on Production was reconstituted to consist of two representatives of employers and two of labour and two neutral chairmen. It was thus able to sit in two divisions, thereby speeding up its work. Additional divisions were later created by adding new members, and by 1918 it was composed of five neutral chairmen and eight representative members.

The Committee on Production awards during the Great War were binding on the National Gas Council and the National Federation of General Workers. The former body had been set up in October 1916, to bring together all employers in the gas industry. The management associations in existence before that date were the Institution of Gas Engineers (founded 1902), the Society of British Gas Industries (1905) representing and manufacturers of gas plant and appliances, and the British Commercial Gas Association (1911) whose object was to publicise the use of gas and defend the claims of the industry against commercial rivals. None of these organisations was fitted to meet the needs of negotiating machinery brought into existence during the war in response to the Munitions of War (Amendment) Act. The I.G.E. was concerned largely with technical and professional matters, although it was treated by employers as an advisory body upon executive and managerial affairs. Nevertheless, it could not claim in any way to represent the finance and administration of the gas industry. The B.C.G.A. was little more than a publicity agency. The S.B.G.I., in spite of its ambitious title, represented only one section of employers in the industry.

One of the first acts of the new National Gas Council was to set up a Committee of Gas Employers, and it was this committee which naturally came to deal with wages, employment of apprentices, hours of labour, overtime, piecework, conditions of employment and education and training. The Edinburgh Undertaking became a member of the N.G.C., but most of the employees were in the N.U.C.W. which negotiated directly with the Edinburgh Corporation and such joint municipal bodies as the Edinburgh and District Water Trust and the Gas Commission. Awards to the N.G.C. and N.F.G.W. were consequently not binding upon the Edinburgh undertaking. The N.G.C., was, however, anxious that wage increases in municipal undertakings should not be granted without close liaison. Thus when in March 1918 the Commissioners proposed to attend a conference with representatives of Edinburgh and Leith Corporations to consider a claim by the N.U.C.W., they were asked, in a letter from the N.G.C. "that no final decision should
should be arrived at until the Committee on Production has adjudicated on the
claim made by the National Federation of General Workers for an increase of
wages and bonus to employees in the Gas and Electrical Undertakings."
The Engineer and Manager (Masterton) was himself a member of the Central
Advisory Committee of the N.G.C., and was consequently authorised to attend the
arbitration proceedings before the Committee on Production, although the award
was not binding upon his own undertaking. He was thus able to report back to
the Commissioners and advise what concessions to make to the N.U.C.W. in the
light of the arbitration proceedings which he had observed in London between the
N.G.C. and the N.F.G.W. This led to the drawing up of an agreement at a con-
ference between the Commissioners, the Town Councils of Edinburgh and Leith,
and the N.U.C.W. under the chairmanship of Professor Baillie (See Page 307).
The N.U.C.W. attempted to claim Committee on Production awards (where these
were higher for workers in ambiguous categories. For instance, in November 1917
it was claimed that the toluol workers at Granton should be placed under these
awards. Communications were sent by the Commissioners to the Government
representative of the Department of Explosives Supply, as any decision would
probably have affected all gasworks carrying out similar operations. On 26th
November 1917, Sir Richard Lodge ruled that the claim put forward on behalf of
the toluol workers had not been established.
The Commissioners continued to be guided by the N.G.C. throughout its
existence. To an application from the N.U.C.W. for a private conference with a
view to wage increases, Masterton replied: "As an agreement is in force between
the N.G.C. and the N.F.G.W., which expires on 31st January next (1919) when a
fresh agreement will be made by these parties, my Commissioners feel that with-
out prejudice to the right of either party, and without any obligation on
either party in this case to fall in with such agreement, it would be well to
delay matters until the terms of such agreement are known, as they may be found
acceptable by both parties as a basis of settlement in the present case."
The Commissioners refused, however, to be drawn into the formal machinery
proposed by the National Gas Council. In answer to the Council's proposal to
set up District Wages Committees (including one for Scotland) the reply on 13th
March 1918 was that "it is not advisable to appoint representatives just yet."
The end of the war led to a reorganisation of the N.G.C. Its original
constitution had laid down that its aim was to form an organisation "to watch
over the claims of the Gas Industry ... and with whom the Government could
negotiate in matters resulting from the abnormal conditions arising out of the
war."/
war." The Council now became the Federation of Gas Employers. In a letter to the Commissioners recommending its new draft constitution, the N.G.C. had pointed out that "... no time should be lost in proposing a council in whom authority could be consolidated and through whom a united front could be shown." The Edinburgh undertaking agreed to subscribe to the new body at the rate of 1/- per million cubic feet of gas, amounting to £95 a year. It is interesting to note, that their contribution to the British Commercial Gas Association, (a purely propaganda body) had for some years stood at 2/6d per million cubic feet.

The objects of the Federation of Gas Employers, which included in its membership both company and local authority undertakings, were:-
(a) to secure common support and co-operation in all labour matters and conditions of employment affecting the general and common interest of the members.
(b) to promote and foster reciprocal good feeling and mutual confidence between members and the appropriate trade unions on the one hand and between members and their employees on the other hand.
(c) to secure the equitable carrying out of agreements made with employees or combinations of employees.
(d) to make provision for the equitable settlement of all differences between members and their employees, and to protect and defend the interest of members against strikes and disputes with employees.
(e) generally to give members such assistance, advisory, legal or otherwise, as they might require.

The National Gas Council, stripped of its industrial relations machinery, continued to exist as a body concerned with the interests of the industry as a whole (rather than with the affairs of individual undertakings) and with the safeguarding of the industry's legal and parliamentary affairs. It continued in existence until 1945, when the new British Gas Council (not to be confused with the Gas Council) took over its functions, and also took over the British Commercial Gas Association, thereby incorporating publicity and propaganda activities.

Other national and area bodies formed between 1919 and 1945 included the National Federation of Gas Coke Associations, the Association of Gas Corporations, the Association of Local Authority Gas Undertakings, and the National Bodies of the Gas Industry in Scotland. The functions of these bodies were analogous to that of the N.G.C., each one concentrating upon its special interest within the larger framework of the Gas Industry. The Edinburgh undertaking seemed somewhat sceptical/
sceptical of the use of so many various organisations. Although it joined the organisation of the Gas Industry in Scotland, when this body in 1935 proposed to appoint a Resident Officer, Edinburgh protested that the appointment would be a waste of money. The National Bodies of the Gas Industry in Scotland went ahead with the appointment, and Edinburgh cancelled its subscription to the organisation. In May 1945, the Association of Local Authority Gas Undertakings reminded the Edinburgh undertaking that it had not yet joined. The omission was not rectified.

In 1919 the National Joint Industrial Council for the Gas Industry was established. It was to be "representative of employers and workpeople, to have as its object the regular consideration of matters affecting the progress and wellbeing of the trade from the point of view of those engaged in it so far as this is consistent with the general interest of the community." Under the proposals of the famous "Whitley Reports" it was to meet at regular intervals for the determination of conditions of employment and of wages (including the methods of fixing and adjusting piece-work and bonus earnings), the utilisation of the practical knowledge and experience of workpeople, technical education and training, industrial research, and any legislation affecting the industry. Ten regional councils were set up, including one for Scotland, to be similarly representative of employers and workpeople.

The second annual report of the N.J.I.C. adopted a Zoning and Grading scheme in which "A", "B", "C", "D" and "E" zones were set up, and the following principles adopted:—

1) Basic rates of pay should alone be considered at this juncture.
2) Each Regional Joint Industrial Council should decide the number of zones for its own particular region. The number of zones would depend on the character of the district in question. (The Scottish region adopted four zones).
3) The categories were to be as under:—
   (A) Industrial undertakings
   (B) Commercial or semi-industrial undertakings
   (C) Residential undertakings
   (D) Undertakings in Agricultural towns
   (E) Rural village undertakings.

Support was given to the National and Regional Joint Industrial Councils by the Commissioners, and, after 2nd November 1920, by the Edinburgh Corporation. There was some hesitation, however, with regard to the application of the Zoning and

1. Cmd. 8606 of 1917; Cmd. 9001 of 1918; Cmd. 9002 of 1918; Cmd. 9099 of 1918; Cmd. 9153 of 1918.
and Grading Scheme (see page 299). The Corporation was prepared to implement the scheme, but only if the men concerned relinquished benefits not provided under the scheme. This led to a threatened strike by the retort-house men. The National Union of General Workers tendered a fourteen-days notice on their behalf and the matter was raised in the Edinburgh Town Council in January 1922. The matter was consequently submitted to arbitration by three members from each side of the N.J.I.C., and the scheme was applied to Edinburgh Corporation's gas undertaking, with effect from June 1922. Further confusion arose from the fact that the N.U.C.W., which included the majority of gasworkers at Granton, was not represented on the Scottish Regional Gas Industrial Council, and consequently opposed the submission of questions to arbitration. In March 1922, however, they were granted representation. The overlapping of union representation of gasworkers was reduced in 1924, when the N.U.G.M.W. was formed. Among the unions it absorbed were the National Union of General Workers, the Gasworkers and General Labourers Union, the Municipal Employee's Association and the National Amalgamated Union of Labour. The Commissioners had in the past refused to deal with the last named of these. The strength afforded to the new N.U.G.M.W. by these amalgamations gave it supremacy, and its representation upon the S.R.G.I.C. led to comprehensive and continuous negotiations at all levels. The National Union of Public Employees which came to represent the gasfitters, locomotive drivers and shunters, was refused representation upon the S.R.G.I.C. in 1938. The Edinburgh Corporation replied to their demands that the locomotive drivers and shunters were employed as gasworkers, and thereby covered by J.I.C. awards.

Between the wars there was a more meticulous observance of the standard rates for craftsmen, and upon the receipt of complaints from the local branches of the unions, the Corporation would request the advice of the F.G.E. This advice was usually followed, and communicated to deputations of the men concerned. The employment of unskilled or semi-skilled men continued, of course, to be a matter for controversy. In 1931, the Secretary of the Scottish Painters' Society complained that painting was being carried out at Granton by riggers. The F.G.E. advised the Corporation that riggers were entitled to the work, but that there was an agreement in force, between the Painters' Society and the F.G.E., with regard to "authorised" painting work which should be reserved for painters, and the Engineer should be careful to observe these regulations. In February 1925, a national agreement was signed between the Executive Council of the A.U.B.T.W. and the Central Committee of the F.G.E., laying down rates of pay, hours of work and holidays for bricklayers and masons in the gas industry. This was formally ratified by the Edinburgh Corporation in July 1925. 
In 1925 the F.G.E. also entered into an agreement with the A.E.U. by which conciliation machinery was set up "to facilitate the settlement of any dispute which might arise in connection with craftsmen members of the A.E.U. employed in gasworks." Decisions of this Conciliation Board were confirmed by resolutions of the Salaries and Wages Sub-Committee of Edinburgh Town Council. This agreement with minor amendments, remained in force for over twenty years.

In 1947 the F.G.E. entered into a new agreement (the A.E.U. having amalgamated during the war with the Confederation of Shipbuilding and Engineering Unions).

This agreement, with the C.S.E.U., signed on 30th April 1947, set out rates of pay and conditions of service of the craftsmen concerned (see page 313), and established national negotiating machinery. Clause 14 of this agreement provided that:

It is hereby agreed that the following procedure shall be adopted in dealing with any question which may arise between the constituent members of the respective parties.

1) Any dispute as to the meaning or interpretation of this Agreement shall be the subject of negotiation between representatives of the Executive Council of the C.S.E.U. and the Central Committee of the Federation. In such case notice of any dispute is to be given by or to the Secretary of the Executive Council of the Confederation to or by the Secretary of the Central Committee of the Federation.

2) Any dispute as to the application or operation of the provisions of this Agreement of any particular Undertaking shall in the first instance be discussed between representatives of the district organisation of the Confederation and the District Committee of the Federation, and failing a decision shall be referred to representatives of the Executive Council of the Confederation and the Central Committee of the Federation for settlement. Notice of any such dispute to be given by or to the Secretary of the district organisation of the Confederation to or by the Secretary of the District Committee of the Federation.

It was laid down that the agreement could be terminated by either party giving the other six months' notice in writing to expire at any time. Alterations or modifications could be dealt with by mutual arrangement.

The F.G.E. as a member of the Refractory Users Federation (which also included the Gas Retort Contractors' Conference, the Association of Boiler Setters, Chimney and Furnace Constructors and the Society of Furnace Builders) also entered into an agreement with the A.U.B.T.W. on similar terms to the above. After agreeing as to rates of pay, etc. (see page 315), it laid down that/
that "any disputes arising between the parties concerned on Works shall be the subject of negotiation between the Divisional Representatives of the Union and representatives of the employer concerned. In the event of failing to agree locally, the matter in dispute shall be referred to the Head Office of the Union for consultation with the Employers' Representatives nominated by the Refractory Users Federation. No lock-out or strike in the Building Industry shall be applicable to members of the Refractory Users Federation on the one hand or to members of the Union employed by members of the Refractory Users Federation on the other hand."

Six months' notice was to be given of termination of the agreement. Alterations or modifications were to be dealt with annually in the month of November, and notice of three months prior to 1st November was to be given in respect of such alterations or modifications.

The dissolution of the Commission in 1920 led to the transfer of the functions of the Treasurer and Collector's Department to the City Chamberlain, and from May 1921, revenues of the Gas Undertaking were collected along with the Burgh assessments and other revenues of the corporation. The clerical employees of this branch thus became merged in the Corporation's clerical staff. This change had been anticipated in January 1920 when salaried employees had been placed on the salary scales of Edinburgh Corporation. Most of this staff, as well as the clerical staff of the Engineer's Department at Granton, became members of N.A.L.G.O. and their terms and conditions of service were negotiated by the National Joint Industrial Council for Local Authority Services (Scotland). The tendency was for salaried employees to form an ever increasing section of the gas industry, particularly during and after the war, 1939 to 1945. The Edinburgh undertaking employed 120 permanent salaried staff in 1939. In 1947, the establishment stood at 173. This was due to the rise in trading activities (sales of gas had risen 50% in this period, and the purchase of raw materials and the supplies and sales of residuals had increased accordingly). Other factors were the work involved in licence applications, permits, food and clothing coupons for workers, P.A.Y.E., and constant changes in conditions and pay of staffs, and frequent applications by trade union for consideration of individual cases. There were also the requirements involved by post-war development and expansion of the undertaking.

The smooth functioning of the staffs covered by N.A.L.G.O. was in contrast to the negotiating machinery available to such intermediate workers as foremen. Between 1931 and 1935 the interests of the retort-house foremen and assistant foremen were represented to the management by the N.U.G.M.W., but the arrangements/
arrangements arrived at were purely local, and there was no district or national agreement in force. The foremen reverted to direct petitions to the management, their main concern being to preserve differentials between themselves and the workers. This aim was one which received the sympathy of the management, as well as the F.G.E. This latter body, when asked by Edinburgh Corporation for advice, merely emphasised that basic rates should be adjusted by individual managements, and that holiday allowances should be related to those granted to staff employees.

Post-Nationalisation

Section 57 of the Gas Act\(^1\) provided that:

"1) (a) Except so far as they are satisfied that adequate machinery exists for achieving the purposes of this section, it shall be the duty of the Gas Council to seek consultation with any organisation appearing to them to be appropriate with a view to the conclusion between the Gas Council and that organisation of such agreements as appear to the parties to be desirable with respect to the establishment and maintenance of machinery for the settlement by negotiation of terms and conditions of employment of persons employed by Area Boards and the Gas Council, with provision for reference to arbitration in default of such settlement in such cases as may be determined by or under the agreements.

2) It shall be the duty of every Area Board to comply with any agreement made by the Gas Council under paragraph (a) of the preceding subsection."

It will be observed that negotiation of the terms and conditions of employment was thus raised to a national level, leaving the area boards to comply with any agreements made by the Gas Council. Negotiating machinery at an area level was to be mainly concerned with implementation of awards, safety, health, and welfare. The immediate effect was to remove the more important aspects of industrial relations out of the local arena, or - where the tendency had already been towards high level negotiation, as with craftsmen - from the district to the national level.

Section 62 of the Gas Act vested in the Gas Council the following national organisations: the British Gas Council, the Federation of Gas Employers, the National Federation of Gas Coke Associations and its constituent associations, and the Association of Gas Corporations. From the point of view of industrial relations, the replacement of the F.G.E. by the Gas Council was the most important. To ensure continuity in negotiations and negotiating machinery, the Gas Council appointed an Industrial Relations Committee to continue the specific duties of the F.G.E. in the field of joint negotiation. This committee consisted of:

consisted of two representatives from each board, under the chairmanship of the
Deputy Chairman of the Gas Council.

Post-nationalisation negotiating machinery falls conveniently into five
main categories: Manual Workers; Craftsmen; Clerical, Administrative, Professional
and Technical Staffs; Intermediate Grades and Senior Officials.

**Manual Workers**

On 26th October, 1949, representatives of the Gas Council and the N.U.G.M.W.
the T.G.W.U. and the National Union of Enginemen, Firemen, Mechanics and
Electrical Workers agreed to the establishment of a National Joint Industrial
Council and of Area Joint Industrial Councils. The new constitutions were
similar to those of the former National and Regional J.I.C., and the same
unions were represented. The new area councils were designed, of course, to
coincide with the jurisdiction of each area board. The functions of the
N.J.I.C. were "to secure the largest possible measure of joint action between
the Gas Council and manual workers (excluding those craftsmen subject to Agree-
ments established under other negotiating machinery) for the safeguarding and
development of the industry, for the general improvement of working conditions,
and for the attainment of improved output with a view to promoting the best
interests of the Gas Council and workers engaged in the Industry." In detail,
these functions were set out ("without prejudice to the generality" of the
foregoing description) as:-

(a) The consideration of wages, hours and working conditions.
(b) The consideration of the establishment of machinery for the promotion and
encouragement of measures affecting the safety, health and welfare of Manual
workers (excluding those craftsmen subject to Agreements established under other
negotiating machinery) employed by the Area Board or Gas Council and the dis-
cussion of other matters of mutual interest to the Area Board or Gas Council
and such Manual workers, including efficiency in the operation of the services
of the Area Board or Gas Council.
(c) The consideration and establishment of means of securing the speedy settle-
ment of disputes in the industry.
(d) The consideration of measures for encouraging the inclusion of all Manual
Workers (excluding those craftsmen subject to Agreements established under other
negotiating machinery) in their respective Associations.
(e) The provision of facilities for the encouragement, consideration and
utilisation of inventions and improvements in machinery and methods and for the
adequate safeguarding of the rights of the authors of such inventions and the
designers of such improvements.
(f)/
(f) The supervision of the entry into, apprenticeship to and training for the Industry and co-operation with educational authorities in arranging and stimulating education in all its branches for the industry.

(g) The collection and publication of statistics and information on matters appertaining to the industry, as and when agreed, and to industries whose existence affects the industry.

(h) The study of special problems of the industry, including the comparative study of the organisation and methods of the Industry, and of industries whose existence affects the industry, in this and other countries; and where desirable the publication of reports; the arrangement of lectures and the holding of conferences on subjects of general interest to the Industry.

(i) The issue to the national or technical press of agreed statements that may be of interest either generally, or to the Industry and its employees.

(j) The representation of the needs and opinions of the Industry to the Government, and to Local and other Authorities, and particularly the setting up of such arrangements as shall ensure that the National Joint Industrial Council is consulted before the introduction of governmental legislation or administrative measures which affect or may affect the Industry.

(k) The consideration of such matters as may be referred to the National Joint Industrial Council by the Government or other Authority.

In pursuance of these functions, "the N.J.I.C. shall:-

(a) establish Area Gas Industrial Councils, define their functions and consider proposals and resolutions submitted from time to time by such Area Councils;

(b) promote the establishment of Works Committees; and

(c) endeavour to co-operate with the Joint Industrial Councils or Bodies representing other industries in order to deal with problems of common interest.

To facilitate the settlement of disputes, a National Conciliation Panel was set up consisting of representatives of both sides of the N.J.I.C. Should conciliation prove impossible, however, the N.J.I.C. may "at the request of the majority of either the Gas Council's representatives or of the Unions' representatives, refer the dispute to the National Arbitration Tribunal or to any other agreed Tribunal for arbitration and any award made in relation to the disputes shall be binding upon the Gas Council and the Area Boards and upon the Unions and the Members of Unions."

In November 1949, less than a month after the establishment of National and Area Joint Industrial Councils had been agreed upon, the Scottish Area Council was set up, consisting of twenty members appointed half by the Scottish Gas Board and half by the N.U.G.M.W. and the T.G.W.U. The objects of the Scottish/
Scottish Area J.I.C., as set down in the national agreement, are:

(a) To implement Agreements entered into by the National Joint Industrial Council for the Gas Industry.

(b) To consider any matters that may be referred to it by the N.J.I.C., and to take such action within its Area as may be called for by the terms of reference from the N.J.I.C.

(c) To make recommendations to the N.J.I.C. on any matters within the scope of the functions of that Council.

(d) To consider any matters of interest to its Area, including matters referred to it by the Area Board or by a Trades Union represented on the Area Council, and to take action with regard to matters which affect only its particular Area, subject to the right of the National J.I.C. to veto any such action, if, in the opinion of the N.J.I.C., it involves the interests of other areas.

More specifically, the functions were:

(a) The consideration of hours, wages and working conditions, including the codification, the unification where deemed desirable, and the amendment of working rules relating to holidays, juvenile labour, overtime, arrangement of shifts and similar matters which affect the convenience of employers or manual workers (excluding those craftsmen subject to agreements established under other negotiating machinery) in the Area.

(b) The consideration of the establishment of machinery for the promotion and encouragement of measures affecting the safety, health and welfare of Manual workers, ( ... ) employed by the Area Board and the discussion of other matters of mutual interest to the Area Board and such Manual workers, including efficiency in the operation of the services of the Area Board.

(c) Suggestions for the co-ordination of local workshop practice.

(d) Facilities for the encouragement, consideration and utilisation of inventions and improvements in machinery and methods and for the adequate safeguarding of the rights of the authors of such inventions and the designers of such improvements.

(e) The supervision of entry into apprenticeship to and training for the Industry, and co-operation with educational authorities in arranging and stimulating education in all its branches for the Industry. The Area Council may, without limitation to its general powers hereunder, appoint representatives on the Councils and Committees or Boards of Educational Institutions in the Area, and may by itself or in co-operation with other bodies take steps to give information to the public of the existence of appropriate educational facilities in the Area.

(f)
(f) The arrangement of lectures and the holding of conferences in the Area on subjects of general interest to the Industry.

The Area Council was to consider any differences which could not be settled locally, and in default of a settlement was to refer such differences to the N.J.I.C.

The new Scottish Area Council's first concern was with undertakings which had previously been outside the scope of regional J.I.C. machinery, (there were seventy such undertakings). Later, by national decision, category "D" wage rates were abolished, and all workers in that category raised to "C". The next step was the abolition of "C" and the raising of such workers to "B". Undertakings like that of Edinburgh Corporation were not concerned in the immediate post nationalisation adjustments of the wage categories of manual workers.

The policy of the Scottish Gas Board with regard to manual grades has been to agree with the unions upon given rates for every job in the industry (and to take account of many contingencies as possible in those variations in working conditions which merit differential pay). In other words the possible margin for disputes has been narrowed as much as possible.

The particular importance of the joint negotiating machinery for manual grades has been recognised by the election of the Chairman of the Scottish Gas Board (Sir Andrew Clow) as chairman of the Scottish Area Council of the N.J.I.C. Whatever a Board Member is considered sufficiently responsible to speak for the industry or the negotiating machinery for other employees, in the case of manual workers the deliberations and decisions of the Area Council involve the direct participation of the Chairman of the Gas Board. This ensures a speedy implementation by the Board of agreements reached through the negotiating machinery.
Craftsmen

The Gas Council found it unnecessary to establish any fresh negotiating machinery with craftsmen who had previously been outside the Gas Industry J.I.C. machinery. The 1947 national agreement between the F.G.E. and the C.S.E.U. was continued as from vesting day, with Gas Council replacing the F.G.E. as the employer signatory. Relations between the Scottish Gas Board and C.S.E.U. craftsmen under this agreement have been most amicable, although there was an unofficial strike of these workers in England - in the North Thames Area - during 1950. The strike followed an award of a wage increase to maintenance craftsmen which had been negotiated under the C.S.E.U. Agreement. The men concerned were dissatisfied with the award and withdrew their labour, remaining on strike from the 15th September 1950 to 19th October 1950. In the end the men returned to work under the conditions of the national agreement. The Attorney General instituted proceedings against certain of the strikers under the Conditions of Employment and National Arbitration Order, 1940. Ten men were found guilty and sentenced to terms of imprisonment. On appeal, however, these sentences were changed into fines.

With regard to the bricklayers and masons, the Gas Council similarly stepped into the shoes of the F.G.E. and continued to honour the agreement between the Refractory Users' Federation (of which it now became a member) and the A.U.B.T.W. Thus, whether bricklayers or masons were employed by contractors or directly by the industry, they were covered by the same agreements and machinery. The participation of the Gas Council in the Refractory Users' Federation, sitting side by side with private employers in negotiations with the union, illustrates the smoothness of the transition. On the other side, the A.U.B.T.W. accepted in respect of bricklayers and masons employed within the gas industry the same basic rate as that laid down for the industry through its negotiating machinery with the Confederation of Shipbuilding and Engineering Unions. In order to ensure, however, that there should be an approximate parity of rates in respect of work carrying extra rates of pay between those enjoyed by contractor's men and gas industry men, an ingenious device was agreed whereby the fire-brick rate for employees of the gas industry varied with the building trade rate, since the standard hourly rate paid to contractors' men was the hourly Grade "A" rate ruling for bricklayers and masons as prescribed by the English and Scottish National Joint Councils for the Building Industry.

There were, however, some minor craftsmen who still lacked adequate negotiating machinery. These were paviors, slaters, tilers and plasterers. It was agreed, after nationalisation, that although not covered by the agreement of the/
of the Gas Council with the C.S.E.U., they should nevertheless enjoy the pay and conditions laid down from time to time in that agreement.

On 17th January 1951 an agreement was concluded between the Gas Council and the Plumbing Trades Union, establishing procedure for dealing with any problems arising from the employment of plumbers, whether as plumbers or gasfitters on the distribution side of the industry. It was laid down that in undertakings where it had been the custom in the past to pay building trade rates to plumbers employed as gasfitters, this practice was to continue. The Scottish Gas Board accordingly entered into negotiations with the Plumbing Trades Union to draw up a list of such undertakings in Scotland.

The agreement with the Plumbing Trades Union was an interesting example of "interlocking" negotiating machinery. Although the Plumbing Trades Union was not represented on the N.J.I.C. for the Gas Industry, it accepted rates laid down by this Council. In cases of disputes, however, there was to be direct discussion between the Union and the Gas Council or Area Board. While certain craftsmen were thus brought within the scope of negotiating machinery under this agreement, the procedure was fairly elastic and informal. To have created another hierarchy of negotiating machinery for these employees - running parallel to the N.J.I.C., the N.J.C. for Gas Staffs and the Senior Gas Officers Joint Council - would have overloaded the industry's already complex structure. This semi-formal machinery has worked fairly well, although there has been some delay in Scotland in completing the list of undertakings falling within the scope of Clause (4).

Although agreement was reached upon the position in most undertakings by the end of 1951, there was disagreement over the position of a small minority. Negotiation was still in progress over these undertakings at the end of the following year. This delay indicates how difficult it can be to secure agreement upon the interpretation of a seemingly straightforward provision. All that was required to be determined was the rate of wages in operation at a given date in respect of a given category or workers, and yet after two years the position is still unresolved in some Scottish undertakings.

Clerical/

1. See overleaf
NEGOTIATING MACHINERY FOR MEMBERS OF THE PLUMBING TRADES UNION

Memorandum of Agreement
between
The Gas Council and the Plumbing Trades Union

This Agreement is made the seventeenth day of January, 1951, between the Gas Council, hereinafter called "the Council", and the Plumbing Trades Union, hereinafter called "the Union".

1. It is hereby agreed that the following procedure shall be adopted in dealing with any problems which may arise between the constituents of the above-mentioned respective Parties consequent upon the employment of plumbers whether as plumbers or gas fitters on the Distribution Side of the Gas Industry.

2. It is hereby agreed that the Union accept on behalf of and for plumbers engaged in the Gas Industry conditions of employment in the Gas Industry as laid down from time to time by the National Joint Industrial Councils and by the Area Joint Industrial Councils for the Gas Industry.

3. The rates of pay are to be as follows: (a) where plumbers are engaged as plumbers the building trade rate to apply; (b) subject to the provisions of Clause 4 where plumbers are engaged as gas fitters their rate of pay shall be that laid down from time to time for gas fitters by the National Joint Industrial Council and/or by the appropriate Area Joint Industrial Council for the Gas Industry.

4. In any Undertaking (listed in the appendix hereto) in which it has been the custom in the past to pay to plumbers in the employ of that undertaking building trade rates while such plumbers are engaged as gas fitters, building trade rates shall continue to be paid unless and until a training scheme for gas fitters is established by the National Joint Industrial Council or by the appropriate Area Joint Industrial Council for the Gas Industry, whereupon such plumbers may have the option of qualifying under that training scheme. In the event of any plumber exercising this option he will be paid in future the appropriate rate applicable under that scheme after qualification.

5. Should any problem arise in respect of plumbers employed by any Area Gas Board the matter shall be discussed between the appropriate representative of the Area Gas Board concerned and representatives of the Union. Failing a settlement of the problem the matter shall be referred by either party to an Area Conciliation Committee consisting of not less than six and not more than ten members appointed as to one half by the Area Gas Board and as to the other half by the Union.

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6. Where a settlement of any problem cannot be arrived at by the Area Conciliation Committee as provided for in Clause 5, the matter shall be referred for arbitration to a National Conciliation Committee consisting of six members, appointed as to one half by the Council, and as to the other half by the Union.

7. In case the National Conciliation Committee is unable to determine any such dispute as is referred to in Clause 5 above, they shall at the request of the majority of either the Council's representatives or of the Union's representatives, refer the dispute to the National Arbitration Tribunal or to any other agreed Tribunal for arbitration and any award made in relation to the dispute shall be binding upon the Council and the Area Boards and upon the Union and the members of the Union.

8. There shall be no stoppage of work pending the result of negotiations in the manner herein provided.

9. Both Parties recognise the desirability of dealing with disputes without any avoidable delay.

10. This Agreement shall remain in force for a period of twelve months and thereafter until either of the Parties hereto give six months' notice in writing to terminate the same, but in any case this Agreement is to be reviewed should the Union become a party to the National Joint Industrial Council for the Gas Industry.
Clerical, Administrative and Professional and Technical Staffs

For the various clerical, administrative, professional and technical staffs, no joint negotiating machinery existed in Scotland. In accordance with Section 57 of the Gas Act, National and Area Joint Councils for Gas Staffs were set up on the lines agreed upon, on 24th February 1950, by representatives of the Gas Council, the British Gas Staff Association, N.A.L.G.O., N.U.G.M.W. T.G.W.U., the Association of Supervisory Staffs, Executives and Technicians, the Gas Engineers' National Guild (later called the Gas Officers Guild - it shares two seats with five other unions), the Association of Scientific Workers, the Clerical and Administrative Workers' Union, and the Association of Engineering and Shipbuilding Draughtsmen.

The functions of the National and Area Joint Councils (consisting of 32 and 24 members respectively, appointed jointly by the Gas Councils and the unions) follow those laid down in Gas Industry J.I.C. machinery. The N.J.C. is to provide a recognised means of negotiation and consultation in order to secure the greatest possible measure of combined action between the Gas Council on the one hand and on the other hand those organisations representing administrative, professional, technical and clerical staffs (from this time onwards designated "staff") who are normally graded. There are the usual clauses about safety, health, welfare, education and training, speedy settlement of disputes (followed by arbitration if not successful), utilisation of inventions and improvements, and the issue of approved statements to the national and technical press. Clause (12) provides for the consideration of "measures for encouraging the inclusion of staff in their appropriate trade unions" (advice which it was probably felt necessary to give to the notoriously un-militant clerical section of the industry). The Scottish Gas Board had not looked with favour, however, upon this particular clause, although it was requested by the Staffs' side to issue a notice recommending all Staff employees to be members of a trade union. After protracted discussion, the Board finally agreed to make a recommendation in less categorical terms. This was accepted by the Staffs' side. There is no repetition, however, of the injunction given to the manual workers in their N.J.I.C. to safeguard and promote the efficiency of the industry. Presumably Gas Staffs did not require this reminder of the raison d'être.

The functions of the area council are to implement Agreements entered into by the N.J.C. for Gas Staffs, to consider matters referred to it by the N.J.C. and occupy itself with the usual welfare, education, safety and health matters at an area level. The inaugural meeting of the Scottish Area Joint Council for Gas Staffs was held on 1st May 1950, when Mr. Charles Murdoch was selected Chairman.
Chairman for the ensuing year and Mr. A.M. Donnet, N.J.C. Vice-Chairman.

By a resolution of the N.J.C. of 22nd February 1950, confirmed in a memorandum of Agreement on 28th June 1950, the N.J.C. confined its scope to Gas Staffs receiving salaries up to a maximum of £800 per annum in the Metropolitan area, £770 per annum for Provincial "A" Undertakings and £755 for Provincial "B". It was left to the Area Council to determine the classification of staffs into "A" or "B". The Edinburgh undertaking was classified as "A". Clerical salary scales were divided into Grades A, B, C and D (in ascending order) and Administrative, Technical and Professional Staffs into Grades 1-12 (see page 332). The Management was, in the first place, to decide the salary and scale which should apply to any employee, and except for promotion from Grade A to Grade B (which depended upon the issue of a certificate of efficiency from the management) appointments depended upon there being a vacancy in the particular grade. The same conditions applied to the higher staffs, with the exception of promotion from Grade I to Grade 2. In all cases, any question as to the rights of an employee under the salary grading scheme was to be dealt with in the first place between the local management and the employee. If dissatisfied with the decision, or with the failure of the management to give a decision, the matter should be considered at a local conference of the Management and representatives of the employees organisation. If no settlement were reached, the question was to be referred to the appropriate Area Joint Council to be dealt with, and from there (in the event of failure to agree) to the N.J.C. Clause (5) of the agreement emphasised that there was nothing in the provisions to prevent the management, at their sole discretion, from increasing the salary of an employee or from transferring him or her to a higher Grade, if thought fit.

Let us see how this appeals machinery works in the Edinburgh Undertaking. Let us assume that a clerical officer is notified by the management that he has been placed in Grade "C" (see page 331). He will henceforth be entitled to draw the salary for this category as applied to a Provincial "A" Undertaking (the classification into which Edinburgh falls). It is more than likely that the man will be dissatisfied and annoyed with this grading, and he will raise the matter with his branch of N.A.L.G.O. The N.A.L.G.O. Committee will ask him to complete a questionnaire giving details of the kind of work he performs, degree of responsibility, etc., and will decide, on the basis of this, whether the man's grievance is justified. If so, a union representative arranges an informal meeting with the Scottish Gas Board member responsible for establishment matters (Mr. Charles Murdoch) and the Principal Administrative Officer for/
for Establishments (Mr. G. Muir Murray). The matter is usually settled at this meeting, but failing such a settlement it is referred to a special appeals sub-committee of the Scottish Area Joint Council for Gas Staffs. The decision of this sub-committee is reported to the Area Joint Council, which adjudicates in the event of failure to agree. It has been necessary on only one occasion since nationalisation for the Area Joint Council itself to resolve the matter. The final level of appeal (to which there has been no recourse yet, as far as Scotland is concerned) is the National Joint Council for Gas Staffs.

According to the Establishments Officer of the Scottish Gas Board, the N.A.L.G.O. has been scrupulously fair and restrained in its use of the appeals machinery. It never presses a case which is manifestly untenable, and its preliminary "sifting" of appeals saves a good deal of fruitless argument with the Board at a later stage.

Intermediate/
Intermediate Grades

In November 1950, constitutions were adopted for National and Area Joint Standing Committees for Intermediate Grades. These were employees who, while not coming within the categories of clerical, administrative, technical or professional staff, had not been covered by the negotiating machinery of the gasworkers. The new National Joint Standing Committee consisted of five representatives from the Industrial Relations Committee of the Gas Council, five from the trade union side of the N.J.C. for Gas Staffs, and five from the trade union side of the N.J.I.C. for the Gas Industry. Each Area J.S.C. consisted of five representatives from the area board, five from the trade union side of the Area J.C. for Gas Staffs, and five from the trade union side of the Area J.I.C. for the Gas Industry.

The function of the N.J.S.C. was to negotiate general terms and conditions of employment of "those employees who, they agree, fall within the description of 'Intermediate Grades'", including negotiation of general alterations in wage rates. The Area J.S.C.'s were to implement the wage rates and local conditions of employment for Intermediate Grades. The placing of an employee or of groups of employees in Intermediate Grades was to be carried out, in the first place, by the Area Boards. In the event of disputes, the Area J.S.C. was to adjudicate. If it failed to reach agreement, the matter was to be referred to the N.J.S.C. "whose decision shall be final and conclusive." In case the N.J.S.C. failed to reach agreement, the matter was to be referred to the National Arbitration Tribunal, or any other agreed tribunal, for arbitration. Any award made in relation to the dispute was to be "binding upon the Gas Council and the Area Boards, and upon the Unions and the Members of the Unions."

The Scottish Area Joint Standing Committee for Intermediate Grades was constituted in 1951 when Mr. Charles Murdoch was elected Chairman and Mr. A.M. Donnet, Vice-Chairman. The main categories of employees which the Scottish Gas Board placed in Intermediate Grades were foremen, meter readers and collectors, distribution district inspectors, clerks of works, weighers and timekeepers. It will be remembered that prior to vesting day the terms and conditions of some of these employees had been regulated by the National Joint Industrial Council for Local Authority Services (Scotland), some had followed the manual workers' awards of the Scottish Regional Joint Gas Industrial Council, but many had been outside the scope of negotiating machinery of any kind.
Senior Officials

Separate negotiating machinery was set up for higher grade staffs, at a meeting between representatives of the Gas Council, the Gas Officers' Guild and the N.A.L.G.O. on 30th May 1951. The Senior Gas Officers' Joint Council was established for officers whose salaries were above those covered by the N.J.C. for Gas Staffs or the National Joint Standing Committee on Intermediate Grades, (i.e., above £770). The principle object was: "To settle by negotiation terms and conditions of service for officers, except in respect of such officers or such categories of officers in the employ of such Area Boards (or the Gas Council considered as an employer) as may be agreed by the Joint Council. Failing agreement reference shall be made at the request of the Gas Council or the organisations, to a ballot of such officers or such categories of officers, such ballot to be held under conditions to be agreed by the Joint Council, the majority result of which ballot shall be binding on the Joint Council." The fact that this Joint Council was dealing with the elite of the industry thus permitted the introduction of direct democracy.

In October 1951, the officers' side of the Joint Council (i.e., the representatives of the Gas Officers' Guild and the N.A.L.G.O.) announced that they would not seek collective settlement by negotiation of the salaries of gas officers whose total emoluments in cash and kind exceed £1,500 per annum, until such time, if at all, as it appeared desirable "to extend negotiations to all or some officers having emoluments above £1,500." This decision did not preclude the collective negotiation of any other matters of interest to officers, irrespective of salary, or the individual negotiation of the salary of an officer who requested it.

The setting up of the Senior Gas Officers' Joint Council was preceded (and followed) by some rivalry between unions who claimed the right to speak on behalf of the officers concerned. The British Gas Staffs Association (membership 17,000) had always aimed at the national rather than the local settlement of the interests of its members. Now under nationalisation its aims were realised for the majority, and the B.G.S.A. was represented on the National and Area Joint Councils for Gas Staffs. With the proposed setting up of machinery for senior officers, the B.G.S.A. went on to claim representation upon this council. It claimed 15% membership in the class concerned (155 out of 1,053). The basis of its claim was that as younger members passed into senior grades, it would be convenient if the same organisation continued to represent them. The B.G.S.A. also emphasised its belief in industrial trade unionism - "gas staffs in gas organisations/

1. Increased to £845 in 1952.
It reminded gas staffs that "large diverse unions" (glancing in the direction of N.A.L.G.O.) "are out of touch with members". The Gas Council declined to accept B.G.S.A. representation, however, on the Senior Gas Officers' Joint Council. The B.G.S.A. retaliated, at its annual conference in April 1951, by passing a resolution urging the Government "to amend Section 57 of the Gas Act which gives arbitrary powers to the Gas Council and Boards to decide which organisations are appropriate to conduct negotiations on behalf of any section of the employees. Recognition is essential to trade unions, but neither the Gas Act nor the National Arbitration Order gives right of appeal against exclusion."

The Gas Officers' Guild was, in name, a new organisation dating from June 1950. In fact, it was the old Gas Engineers' National Guild, an exclusive society with a high entrance fee. To meet the new conditions of nationalisation and to emphasise that gas officials who were not engineers might join, the name was changed, and the rules amended (including the abolition of the entrance fee). Its membership by 1951 was 1,250, which included 80% of the senior officers of the industry. The name "guild" was preserved, presumably to indicate that the organisation was still concerned with professional standards and obligations but there was a new emphasis upon negotiating functions. The extension of the Guild to non-engineers was a recognition of changes since nationalisation. The functions of the gas engineer - the "all round" manager of the past - were being transferred to a small group of headquarters staff who took the decisions regarding production and distribution, layout and construction of works, sales campaigns, purchase of new equipment and many other administrative and executive matters. The gas manager was now redesignated the "unit controller" (Walter Herring's views on the transition can, fortunately, never be known!) and his main tasks were to operate the works, and distribute gas and coke. Headquarters would supply specialists in civil, mechanical, and electrical engineering, in chemistry and physics. New kinds of senior officers were thus springing up in the gas industry, and it was the aim of the Gas Officers' Guild to represent them in negotiations.

The other organisation represented on the Senior Gas Officers' Joint Council was the N.A.L.G.O. (claiming to be the "largest organisation for black-coated workers in Great Britain"). One attractive feature which N.A.L.G.O. could offer was a Legal Department which had long experience on compensation for loss of office in local government, and petitions to Parliament, as well as claims and cases/1.

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1. Two-thirds of the membership were Engineers or Deputy engineers and/or Managers of Undertakings.
cases running into thousands annually. Just prior to nationalisation, the N.A.L.G.O. had admitted non-municipal gas staffs to membership. "We do not believe in a closed shop," stated Mr. E.L. Riley, President of the N.A.L.G.O. on 12th June 1951, "in the sense ... of a trade union recruited to one hundred per cent membership of either its members or employers."

N.A.L.G.O. complained that the technical journals of the gas industry were encouraging officers to negotiate via the Gas Officers' Guild, and protested against propaganda stirring up rivalry. It suggested that there should be a polite modus vivendi with regard to the Senior Gas Officers' Joint Council.
Consultation and Consultative Machinery

Consultation between workers and management at the place of work was, in the early days of the Edinburgh undertaking, limited to complaints to the Engineer and Manager and occasional petitions and deputations to the Commissioners. These petitions might embrace a variety of subjects; there was little distinction between matters which in a later era would be classified under "negotiations" and "consultation." The petitions would be signed by the members of the department concerned, and until about 1913, deputations would consist of men elected by their fellows assembled at the place of work. In September 1911 a petition bearing 237 signatures was submitted to the Commissioners:

"We the undersigned Petitioners engaged at Granton Works on a nine-hour day beg respectfully to ask that work on Saturday stop one hour earlier than at present. In order that the number of hours per week remain the same as usual, we would be agreeable to shorten the hour we have at present for dinner to three-quarters of an hour which is the same time as we have just now for breakfast. On Saturdays, the time allowed for breakfast to be extended to one hour to allow for the excess quarter of an hour during the week. To work nine hours, most of us are away from our homes about 13 hours on five days out of six, and we would prefer that an extra quarter of an hour be added (as above) on those five days so that we may have the benefit of the additional hour on Saturdays. We would respectfully point out that already two-thirds of the workshops in Edinburgh have adopted the closing of their premises at noon on Saturday. We crave that this petition have your favourable consideration."

In this case Masterton supported the request, but suggested that the extra fifteen minutes should not be added to Saturday breakfast. Instead of finishing at 4.45 p.m. on Fridays as was the practice, the men should finish ten minutes earlier to permit the completion of pay before the departure of the train. The men were allowed by the Commissioners to finish work at 11.45 on Saturdays as desired, "but if efficiency is affected by three-quarters of an hour instead of an hour's rest at midday," the Commissioners reserve the right to revert to former times."

As a result of this petition the Gasfitters and Labourers applied to finish work at 1 p.m. instead of 2 p.m. on Saturdays, offering to start work at 7.45 a.m. four mornings a week. "This would not be in the interests of the public," Masterton warned the Commissioners. "It would mean the men would arrive at Consumers' houses between 8.30 and 9 a.m. This would be too early for the convenience of the public." The gasfitters were permitted, however, to work two nights a week until 6 p.m. instead, thereby qualifying for an early finish on Saturdays.

In/
In July 1913, we find the National Union of Corporation Workers representing the men on a disciplinary matter. Included in a letter asking for more pay, they also request the reinstatement of men who had been caught playing cards in their own time. The Commissioners' reply was that although the playing of cards was not prohibited, these men had been gambling. Not only was this forbidden, but the men concerned had been warned previously.

Deputations were usually received by the Works Sub-Committee of the Gas Commission, and it was only very rarely that a request for a hearing was turned down. Deputations to the Commissioners were usually concerned with grievances, however, rather than with positive proposals. These meetings represented a failure to arrive at an understanding at the place of work, and were a last desperate attempt by the men to gain their ends against the apathy (if not actual hostility) of the Engineer and Manager. Yet insofar as the Commissioners were frequently brought face to face with representatives from the workshop level (who, although respectful, were never inhibited in speaking their minds) the procedure might well be designated "consultation".

There were regular visits by the Commissioners to the Granton Works, but they were more concerned with technical and financial matters than with industrial relations. Judge Robert A. Douglas, a member of the Commission, was complaining in 1908 that such visits were a waste of time, and he protested against "the uncalled for expense connected with the inspection of the works, which necessarily includes the usual lunch ... I think its expediency is questionable at a time when hundreds of men who are able and willing to work cannot find employment, and have difficulty in getting bread."

The war (1914-1918) witnessed a tremendous increase in trade union activity among Granton workers, but it was not until the publication of the "Whitley Reports" that the establishment of any formal consultative machinery was discussed. The Whitley Committee on Relations between Employers and Employed had expressed the view that:

"... a permanent improvement in the relations between employers and employed must be founded upon something other than a cash basis. What is wanted is that the workpeople should have a greater opportunity of participating in the discussion about and the adjustment of those parts of industry by which they are most affected."

The Works Committee was obviously essential to the realisation of this objective. Although these committees were to be excluded from negotiations in regard to wages and conditions (which were to be dealt with at National and District level) they were to embrace a wide variety of activities; the issue and revision of works rules; questions of discipline and conduct as between management and workpeople; terms of engagement of workpeople; technical library facilities and lectures on the technical and social aspect of the industry; training of apprentices; suggestions for improvements in method and organisation/1. Cmd. 8606 of 1917; Cmd. 9001 of 1918; Cmd. 9002 of 1918; Cmd. 9099 of 1918; and Cmd. 9153 of 1918.
organisation of work. The Whitley Reports recommended trade union participation in these committees, and the trade union structure was strongly emphasised in the model constitution put forward by the Granton workers in 1918. The men's proposals were laid before the Commissioners in November, and they appeared on the agenda under the somewhat terrifying title of "Granton Works People's Works Committee." The name was changed next month to the "Edinburgh and Leith Corporation's Gas Commissioners' Employees Committee." This new title could hardly have been mistaken for a revolutionary slogan.

A letter from Mr. W.S. Howie, Chairman, and Mr. T.M. Strachan, Secretary (pro tem) of 34 Roseburn Street, Edinburgh, informed the Engineer and Manager:

"We have been instructed by the newly formed Employees' Committee to send you for submission and endorsement by your Commissioners a copy of the constitution of the said committee, which has been set up on the Government's recommendation under the Whitley Report. We trust it will carry out the purpose it has been set up for - viz., to create and foster a better understanding and good feeling between employer and employee."

The deputation received by the Commissioners to present the new constitution was certainly a representative body; it included a gasfitter, a clerk, a retort-house man, a tinsmith, a bricklayer, a patternmaker and a pipelayer. The constitution consisted of the following clauses:

1) That this Committee, representative of the various departments, duly elected by the Employees with the sanction of the Trade Unions affected, shall be known as the Gas Commissioners' Employees Committee.

2) Constituted by Government recommendation and recognised by the Gas Commissioners, its duty is to further a better feeling between employer and employed by the removing of all grievances in the following manner:

(a) When disputes occur in a department, it shall be reported at once to the representative of that department who, with a local committee, shall investigate the grievance, and if found to exist, representations shall be made to the foreman or superintendent, and failing an amicable settlement, the dispute to be reported immediately to the Secretary.

(b) Any grievance reported must be stated in writing to the Secretary and signed by the Shop Stewart of the Department affected, and it shall be the duty of the Secretary to summon a meeting of the Sub-Committee (and the person or persons affected if he should think it necessary) as soon after receiving the complaint as possible, but not later than 48 hours.

(c) Any grievance enquired into and found to exist shall be reported in the first instance to the Works Manager (should the said grievance take place at Granton Works) and to the heads of departments in all other cases; failing satisfaction, it must be immediately/
immediately reported to the Engineer and Manager or Treasurer; and again failing a satisfactory settlement, a meeting of the full Committee must be called and the whole case placed before them.

Membership

3) It shall be the duty of every Shop Steward in the various Departments to see that every employee in his Department belongs to a trade union, and shall report to the Secretary of the Committee any employee who persistently refuses to join one, as it has been pointed out in the Whitley Report, it is to the interests of all concerned that every man or woman ought to be members of a trade union. We trust that the Shop Stewards will carry out this recommendation.

Imaginary Grievances

4) Any person who habitually complains, and the Committee on enquiring decides that the grievances are imaginary, the said person is liable to be reported to the Management for trying to cause dissatisfaction among the employees.

Appointment of Committee

5) The Employees' Committee shall be appointed at a mass meeting of the employees to be held annually on the last Monday in September (or any date that may be arranged). Every Department having 30 employees or over shall have the right of being represented by a member. Under that number they will be grouped until that number is reached, when they will select a member to represent that group. After the Committee is formed, a Sub-Committee shall be appointed of ten, consisting of Chairman, Secretary and Treasurer, and seven members representing Granton, Calton Hill, Waterloo Place and Leith. Trustees and auditors will then be appointed.

Contributions

6) The rate of contribution which shall be paid to representatives of each department on the first Saturday of every month will be one penny per month.

Duties of Chairman

7) The Chairman shall preside at all meetings of the Committee, and shall conduct its business in a proper manner. He shall have the power to call a special meeting conjointly with the Secretary and Treasurer, or at the request of any three members of the Sub-committee.

Duties of Secretary

8) The Secretary shall attend all meetings, conduct all correspondence, file all letters sent to him, copy in a book all letters sent by him in reply, issue summons for all meetings, take minutes of proceedings and write them in a book kept for that purpose; keep a record/
record of date and place of meeting.

Duties of Treasurer

9) The Treasurer shall receive all contributions and any other monies belonging to the Committee or received under their auspices. He shall submit an Annual Statement along with the bank and receipt books, present a debtors and creditors account of his intromissions, pay all accounts where duly authorized by the Committee, and be able to give a correct statement of the Committee's Funds, procure all monies and vouchers belonging to the Committee and deliver same to any person authorized by the Committee. All monies above £5 to be deposited in the name of the Gas Commissioners' Employees Committee.

Trustees

10) The Chairman, along with three members elected, shall act as Trustees. The signature of two trustees shall be required for any money on behalf of the Committee.

Auditors

11) Two members shall be appointed to audit the accounts, who shall sign the necessary books and vouchers if found to be correct.

Meetings

12) The Sub-Committee shall meet the second Wednesday of each month to receive contributions and carry on the ordinary business. Special meetings will be held as required.

Recognition of Committee

13) The names of the sub-committee, along with the names of the various departments, will be notified annually to the Clerk of the Gas Commission, and Engineer and Manager, the Treasurer, and Heads of every department. Every employee shall be entitled to a copy of this constitution.

None of the foregoing rules shall be altered or abrogated unless at the Annual Meeting in September. Notice of proposed alterations or abrogation or any part or all of this constitution must be made in writing to the Secretary not less than 14 days before the Annual General Meeting takes place.

The Gas Commissioners sought the advice of the Ministry of Labour, and they were informed that it was desirable that a general plan for works committees should be laid down by the National Joint Industrial Council. There was not yet an N.J.I.C. for the Gas Industry, but there was no reason why the Gas Commissioners should not recognise the Employees' Committee in a provisional way, on condition that any arrangement was subject to modification when the N.J.I.C. was formed.

The Commissioners accordingly appointed a sub-committee of five members "to meet a similar/
similar number of representatives of the Workmen's Committee, as and when required, to
discuss any grievances or questions arising, pending the setting up of the permanent
Committee under the Whitley Reports."

In fact, a permanent committee was never set up. The Commissioners' sub-committee
met the representatives of the Employees' Committee once. Among the topics discussed
were the re-absorption of demobilised soldiers, and promotion schemes from the Surveyors'
meter readers) department to the Consumer Ledger Clerks' Department. The transfer of
the undertaking to Edinburgh Corporation marked the end of this brief experiment in joint
consultation. Grievances after this time were taken up directly with the management by
shop stewards or trade union officials. No formal hierarchy of committee and sub-com-
mittee survived. The postwar depression was no doubt the main reason for the failure to
implement the Whitley recommendations at the works level, and it is difficult to find
any reasons springing from the nature of the gas industry as such. As in other
industries, the main concern of the gasworkers after the war was to safeguard their
wages and hours of work - tasks which could be left to the union at the district and
national level. Although the Granton constitution attempted to consolidate trade
unionism at the works level, its aims were unambitious and negative. The emphasis on
"grievances" throughout the constitution was not altogether in harmony with the positive
role envisaged for such committees by the Whitley Reports. Nor was the management brought
in at the proper level of discussion; after conclusions had been formulated the men's
representatives were to request an audience with the representatives of the Commissioners,
rather like foreign ambassadors presenting their credentials. It is difficult to imagine
anything further from the spirit of "Whitleyism". Not was there any reference to "the bet
ter utilization of the practical knowledge and experience of the workpeople" or to
"co-operation in carrying new ideas into effect." It is true that the remoteness of the
end-product from the individual gasworker militates against "production consciousness"
but there was (and is) no reason why the gasworker should not concern himself with
maximum efficiency, in his capacity as a worker interested in the content of his task and
the prosperity of the industry. His role as a trade unionist can be adequately and
properly exercised at a different level. The emphasis upon trade union membership in the
Granton constitution no doubt raised the suspicions of the management. They would
probably have been more willing to consult with workers upon matters of production,
discipline and welfare, had the emphasis been upon a co-operative internal group of
workers. By placing trade unionism at the forefront, the workers introduced an element
of bargaining, of bluff and counter bluff, which although proper to negotiations on
wages and hours of work, did not make for harmony in consultative machinery. Thus
traditional attitudes of suspicion and caution were aroused when the situation really
needed/
needed the maximum compromise from both sides. This suspicion was not removed by the lip-service paid to the punishment of "any person who habitually complains" (clause 4). It is interesting to observe the emphasis in the constitution upon controlling the committee's own officers and members. The elaborate drill laid down for the Treasurer and Secretary was probably prompted by memories of an earlier experiment in workers' control - the Granton Canteen Committee (See Page 375).

In 1922 the National Union of General Workers (later N.U.G.M.W.) asked for permission to hold meetings in the works, and to put up notices. The former request was refused, but the second was granted, subject to the approval by the Engineer and Manager of the terms of each notice. The correspondence upon this subject indicated a general "cooling off" of management-worker relationships from the ardent hopes of 1918. Some kind of proper consultative machinery would also have helped to resolve such difficulties as the participation of workers in public affairs. In 1925, for instance, a fourth-grade clerk wrote to say that he had been nominated by the Edinburgh Trades and Labour Council to stand for the Parish Council in St. Stephen's Ward in the forthcoming election in November. Could he have leave of absence to attend parish meetings if he made up the time later? The request received a summary refusal, against which there was no appeal.

The only examples of consultative committees after 1920 were the Canteen Committee and the Safety Committee. The former existed uneasily from 1920 to 1927 running increasingly into debt. The Safety Committee was more successful, being denied the right to incur capital expenditure. The management representatives were the works superintendent (chairman) and two assistants nominated by himself, the machinery section foreman, and a member of the office staff acting as secretary. From the men's side, members of the committee were nominated (by the management) from the machinery shop section, each of the various shifts, and two day workers were also included. One of the day workers was always a repair and maintenance man - the roving nature of his task providing a good overall picture of the condition and needs of the works.

Since nationalisation the unions have claimed the right to nominate members from the men's side, and this has been conceded. The Committee is still constituted in the same proportions, and is purely advisory. It meets eight times a year, and such times as are necessary to investigate accidents.

There is a full-time Safety Officer, and the Works Superintendent has the right to deal with most matters raised. Those involving expenditure must, however, be referred to the divisional superintendent. The success of the Safety Committee lies, perhaps, in its well defined scope. Many problems are questions of law (the implementing of the Factory Acts), and upon questions of safety the management is, in any case, more disposed to give the/
the men the benefit of the doubt than upon other matters. The men themselves are keenly
and actively interested in the affairs of the committee, and their views are based upon
"the practical knowledge and experience" which the Whitley Reports recognised as the
essential contribution of the worker. The present Works Superintendent (Mr. Scott)
emphasises that the Committee is not just window dressing; upon the subject of safety
measures, he finds that the unions are "aggressively interested". 1.

Post-Nationalisation

Section 57 (b) of the Gas Act stated:

"It shall be the duty of each Area Board and of the Gas Council to seek consultation
with any organization appearing to them to be appropriate with a view to the conclusion
between that Area Board or the Gas Council, as the case may be, and that organization of
such agreements as appear to the parties to be desirable with respect to the establishment
and maintenance of machinery for the promotion and encouragement of measures affecting the
safety, health and welfare of persons employed by the Board or Council, and the discussion
of other matters of mutual interest to the Board or Council and such persons, including
efficiency in the operation of the services of the Board or Council."

In the Gas Industry it was left to the National Joint Industrial Council - primarily
a negotiating body - to "promote the establishment of works committees" (see page 349)
rather than create parallel national consultative machinery. This latter course was
taken, as we have seen, in the coal and electricity supply industries. At the other
extreme, the two functions of negotiation and consultation were combined at all levels
in the case of Inland Transport and Civil Air Transport. The Gas Industry took the
middle course, however, by leaving the negotiating machinery to cover consultation at the
national level and by setting up separate Committees for joint consultation only at the
local level.

A model constitution for Joint Consultative Committees was agreed upon and ratified
on 12th February 1951 by the N.J.I.C., the N.J.C. for Gas Staffs, the C.S.E.U. and the
A.U.B.T.W. Its provisions were as follows:

Preamble

It is the intention that this Model Constitution shall provide for the establishment
of Joint Committees under Section 57(b) of the Gas Act whereby all employees of Area
Boards and of the Gas Council (which bodies are hereinafter referred to as "the employers")
will be able to consult with the management on matters of common interest. Questions
relating to wages and salaries and conditions of employment which are normally dealt with
between the employers and the appropriate trade unions shall be excluded from discussion
on/

1. A report on a meeting of the Granton Safety Committee is given in Appendix No II (a)
Page 679.
on the joint committees. In the event of a joint committee being unable to reach agreement the difference shall be referred to the Trade Union official and the appropriate Area Board representative for discussion. In the event of the difference not being settled at this stage, then the question may be referred by either side to the appropriate joint consultative committee meeting.

1) Constitution.

The Joint Committee shall be known as the ... Committee.

2) Functions

(a) To promote and encourage measures affecting the safety, health and welfare of persons employed by the Employers, and to discuss other matters of mutual interest to the Employers and such persons including efficiency in the operation of the services of the Employers.

(b) To ensure the greatest measure of goodwill and liaison between Employers and Employees and to prevent or remove causes of friction and misunderstanding.

3) Questions relating to wages and salaries and conditions of employment which are normally dealt with between the employers and the appropriate Trade Unions shall be excluded from discussion on the Joint Committee.

4) Membership

The Joint Committee shall consist of representatives appointed by the Employer and Employees respectively. The number of employers' representatives shall not exceed the number of Employees' representatives.

5) Election of Employees' Representatives

(a) The election of Employees' representatives shall be by secret ballot. Every employee shall be entitled to vote in the ballot for the election of Employees' representatives, provided that he

(i) is 21 years of age or over and

(ii) has been continuously employed by the Employers for a period of not less than six months immediately preceding the ballot.

(b) Any employee who has

(i) reached the age of 21 years, and

(ii) been continuously employed by the Employers for a period of not less than six months immediately preceding the ballot and is a member of a Trade Union which is party to the agreement under which this constitution is established, or Trade Union recognised by the Gas Council, shall be eligible as a candidate for election.

(c) Each candidate for election shall be nominated by two employees qualified to vote in the ballot and shall have signified his willingness to offer himself for election.

(d)/
379.

(d) Nominations shall be made on forms provided and shall be in the hands of the Secretary or Joint Secretaries) of the Joint Committee not less than one week prior to the date of the ballot.

(e) The votes cast at an election of Employees' representatives shall be counted by two scrutineers, one appointed by the Employees and one appointed by the Employers.

(f) All reasonable facilities for holding the ballot shall be provided by the Employers.

6) Retirement, Reappointment and Re-election

(a) The first elected representatives on the Committee shall hold office until ... and thereafter the term for which elected representatives will normally hold office shall be the period of 12 months from the ... following their election or until the new committee has been elected. Retiring members shall be eligible for re-election.

(b) Any casual vacancy occurring amongst the Employees' representatives shall be filled by the election of another representative in accordance with the provisions of Clause 5. Such elected representatives shall hold office until the next ballot.

7) Officers.

(a) Chairman: The Joint Committee shall appoint a Chairman.

(b) Secretary or Joint Secretaries: The Joint Committee shall appoint a secretary (or joint secretaries). In the event of it being decided to appoint joint secretaries, one shall be nominated by the Employers and another by the Employees.

8) Meetings

(a) The meeting of the Joint Committee shall be held as often as necessary and in any event not less than once every quarter.

(b) A special meeting of the Joint Committee shall be held with the approval of the Chairman, not later than one week from the receipt of a request from either side for the holding of such a meeting.

9) Voting

The voting at all meetings shall be by show of hands. No resolution shall be regarded as carried unless it has been approved by a majority of the representatives present on each side of the Joint Committee.

10) Quorum

A quorum of the joint committee shall consist of one third of the Employers' representatives and one third of the Employees' representatives.

11) Facilities for meetings.

The Employers shall provide reasonable facilities for holding meetings of the joint committee. No deduction shall be made from an Employee's earnings for the time actually lost/
lost in attending any such joint meeting.

12) Minutes of Meeting
Copies of the minutes of the proceedings of all meetings of the joint Committee when agreed by both sides shall be brought to the notice of the Employees.

13) Finance
The administrative expenses of the Joint Committee shall be met by the Employer.

14) Press Notices
No information regarding the business of the Joint Committee shall be given to the Press.

This model constitution was brought to the attention of the Scottish Gas Board in a letter from the Industrial Relations Officer to the Gas Council (Dr. Alfred B. Badger, M.A.), dated 2nd April 1951. Dr. Badger stated that "this model constitution can now be implemented in your Area in agreement with such Union or Unions as you may deem necessary."

It will be observed that the model constitution left room for local variations. The form of the committees depended on local demand, and might, for example, provide one committee for all grades, or a number of committees, each for a different group of grades. Dr. Badger stressed that local wishes should be taken into account in the final draft of the constitution agreed upon. That the consultative committee of the gas industry should have possessed such flexibility was in keeping with the higher degree of statutory decentralisation conferred upon the industry. This procedure of building up the machinery of joint consultation from below (with only the most general guidance from the national and regional negotiating machinery) was a departure from the procedures of other nationalised industries. It also differed markedly from the negotiating machinery in the gas industry where the trend had been away from local variations.

One unfortunate consequence, however, of leaving the introduction of such committees to each area board has been (in Scotland) that no effective action has been taken.

As early as April 1951 the trade unions were pressing the Scottish Gas Board to go ahead with the introduction of works committees. A letter of 11th April from the Secretary of the Trade Union side of the N.J.I.C. for the Gas Industry (Mr. A.H. Donnet) informed the Scottish Gas Board:

"I have been advised ... that Areas should go ahead and set up their works committees. I shall be pleased to have your observations as to how this matter can best be entered into."

The Board replied that the time was not opportune for the introduction of such committees; it would be better to concentrate on settling the disagreement over wages and conditions of employment which were still outstanding, and were disturbing the smooth running of the industry. The Board took the view that the disposal of these points of divergence/
divergence with the unions was the pre-requisite of the introduction of any new joint committee at the undertaking level.

On the 17th August 1951 the Scottish Gas Board was subject to further prodding - this time from the Minister of Fuel and Power. The Minister wanted to know what the Board was doing over works committees. He reminded the Board that one of the objects of nationalisation was to improve labour relations. The Board replied that it fully agreed with this object, but that pressure of work over wage negotiations was holding up the introduction of works committees.

Since that time the Board has made preliminary arrangements, such as drawing up groupings of undertakings; groups of smaller undertakings will, for instance, combine under one committee. At the other extreme in the largest undertakings there will be two committees, one for staff and one for manual workers.

Procrastination in this matter has not been confined to the Board. The trade unions have not yet decided such points as the place of foremen in the consultative machinery - whether they should sit upon staff committees or among the manual workers, and the Board claims that it cannot go ahead until the unions have made their views known upon this matter. The Board is also awaiting the decision of the unions as to how they wish to distribute the seats (e.g., how many stokers on the committee). It was hoped that the trade unions would agree among themselves upon such matters and submit a final draft for the approval of the Board. The unskilled workers, however, have refused to consult the craft unions, and it has been left to the Board to open separate negotiations with the various unions - a procedure which is involving considerable delay and confusion. This traditional rivalry between skilled and unskilled workers had thus held up the efforts of the Board to combine them in one committee.

It seems likely that the real cause of the delay in Scotland in introducing consultative machinery is that there is insufficient staff. There are no labour officers or advisers at the levels of division, group, sub-group or undertaking. There is in fact only one "industrial relations" officer for the whole of Scotland. This is Mr. Murray, who is the Principal Administrative Officer (Establishments) at Board Headquarters in Edinburgh, and he performs many additional routine matters on such general personnel matters as staffing and grading. He has only one assistant, appointed late in 1952. This labour staff stands in marked contrast, for instance, to that of the coal industry, and to that of other areas in the gas industry. Indeed it is the proud claim of the Scottish Gas Board that they manage with a much smaller headquarters staff, in relation to size, than any other Area. This economy has been achieved by maintaining very few technical and planning assistants at Board headquarters (these officers are sent out to lower formations, where it is considered that they will do more good) and by refusing to create/
create such appointments as welfare, education, and training officers. This economy has certainly much to commend it, and is after all appropriate in a Scottish organisation. It has meant, however, that the gas industry in Scotland has lagged far behind the other fuel and power industries in the provision of consultative machinery. It surely would not have been difficult, for instance, to have extended the scope of the Safety Committee at a large undertaking like Granton to include such matters as health, welfare and production matters. The present plan is to wait until works committees are introduced generally. When a works committee is finally formed at Granton, the safety committee will then become a sub-committee of the wider body. One advantage at Granton will be that the tradition of consultation which has grown up in the sphere of safety measures and improvements should ensure that the new works committee will approach its tasks with responsibility and aptitude.

At the present time, however, (March 1953) the progress of the Scottish Gas Board in the field of joint consultation by no means justifies the assertion made in 1952 by the Gas Council that "many committees are already in being and more are being established ... the fact that the nationally approved model constitution for Joint Consultative or Works Committees can be adapted to suit local requirements has proved most helpful."¹

"Passing through the exhauster house," wrote a "Scotsman" reporter on 13th October 1906, "we ascend a short staircase and proceed along a corridor, the floor of which is in reality the top of a double battery of water-tube condensers for cooling the gas. On either side of this corridor, the workmen's comfort is provided for in the way of lavatories, bathrooms, etc., the bathrooms being fitted with hot and cold shower baths, as well as plunge baths with fresh and salt water. Upon the other side, there is a spacious messroom with an ample amount of light and ventilation, fitted with steamovens and water-boilers; a feature of this messroom being the provision of small cupboards, forming a dado round, measuring about 17 inches by 16 inches by 6 feet high, for the workmen's clothes; each cupboard being fitted with a hasp, the workmen providing their own locks." Thus had Herring fulfilled his aim of combining technical efficiency with the welfare of the men, and the structure described above is virtually the same in 1952.

Welfare was catered for in other ways. Workmen were transported free of charge by train from Princes Street Station, and four services were run daily to a station platform in the works. Men coming into the station from the city registered their arrival by inserting a numbered key (which served as each worker's railway pass) into an instrument which recorded the number of the worker and the minute of his arrival. This free service was continued until the introduction of the Zoning and Grading Scheme for gasworkers in 1921, and the railway continued to operate daily services until 1942.

The distance of Granton works from the city led the Commissioners to consider the construction of houses for workers. The Engineer and Manager occupied "Granton House" and various dwellings were erected from time to time for foremen. In 1907 the Commissioners appointed a sub-committee to examine the possibility of erecting houses for workers who wanted them. Out of the seven hundred men concerned, the number willing to take such a house at Granton turned out to be one, and the idea was dropped.

In the same year a resolution was passed providing a canteen. The Commissioners gave the use of suitable premises, along with cooking utensils. They paid the wages of a steward and an assistant and left it to the workmen to arrange for any other assistants who might be required and to institute a reserve fund from which to replace breakages and such like. Previous to this, messrooms/
messrooms had been provided only for the stokers and purifying men, other workmen being permitted to cook their food in the departments in which they worked. At a meeting held on 16th January 1908, the men elected a canteen committee of one foreman and fourteen workmen. Eight months later the complaints of the men about the food and condition of the canteen had grown so loud that Herring dismissed the committee and appointed the foremen of the various departments to carry on the administration of the canteen. The perquisites of this office were free meals and 4½% of the takings. The men were highly suspicious of this arrangement and continued to complain. Masterton, who had replace Herring as Engineer and Manager, declared in 1913: "There seems to have been an organised attempt to stir up discontent. I do not recommend going back to workmen plus foremen, nor workmen alone. One method would be for the Commissioners to appoint a steward, and make purchases and fix prices. But the men would still be suspicious. Or an outside caterer could be engaged to run the canteen on an ordinary commercial basis. As an alternative, the canteen could be closed for a time, during which the men would doubtless be better able to appreciate its advantages, and perhaps formulate some scheme whereby it could be reopened on lines that would be mutually satisfactory." The Commissioners decided that a committee of five foremen should continue to run the canteen, and that a quarterly balance-sheet should be exhibited there.

In 1920 the canteen was put back under a committee elected by the workmen, and this experiment proved unsuccessful. The number of meals fell from 1,200 weekly to 150. In 1927 the experiment in industrial democracy came to an end, and the management took over. A woman cook was engaged at 35/- to 40/- a week, and she operated the canteen under the general supervision of the management. The canteen continued, however, to be run at a loss. Concern was expressed in 1940 that the loss for the year was £79:6:9. In 1947 the deficiency stood at £431:–:7d. In spite of the modernisation of the canteen in 1945 with all the latest gas cooking appliances, it is very poorly patronised by the workmen. The present Works Superintendent (Mr. J.P. Scott) attributes this to the fact that Granton is now surrounded by housing estates and workers live nearer to the job than they used to do.

In the early days of the undertaking, Granton was far in advance of other gasworks in its welfare amenities, although many of these amenities were prompted by the remoteness of the works and the desire to obtain labour easily.

By the end of the Second World War it had lost its lead over other large-scale municipal undertakings, although its facilities continued to be better than those/
those enjoyed at many small private undertakings.

Post-Nationalisation

The Gas Act of 1948\(^1\) laid upon the Gas Council and each Area Board the duty of promoting and encouraging "measures affecting the safety, health and welfare" of their employees. In spite of this provision there has been no machinery established comparable to that in the coal industry for embarking upon new welfare schemes, either at national or divisional level. In the Scottish Area, for instance, there is no welfare officer employed at any level - Board, divisional, group, sub-group or undertaking. Whatever welfare activities require attention are dealt with by the Establishments Officer of the Board. As this official spends rather more than a ten hour day on such matters as wage negotiations, grading, and general establishment duties, he has little time left for dealing with welfare. There is no co-ordinated policy; individual improvements are usually sanctioned by the Divisional Controller (within the financial autonomy permitted to him) upon the application of the manager of the undertaking concerned. Indeed, it is the deliberate policy of the Board to leave welfare requirements to be decided upon the needs of individual undertakings, rather than draw up any welfare plan or schemes of priority for the whole Area. The progress of joint consultation will no doubt bring more and more welfare needs to the attention of higher formations, although even then the Scottish Gas Board does not intend to depart from its policy of leaving initiative to come from the bottom. This is in marked contrast, as we have seen, to the paternalistic schemes introduced into the Coal Industry.

The main improvements that have been sanctioned in Scotland since nationalisation are concerned with washing and messing facilities and the activities of employees' social clubs and kindred organisations. On 23rd April 1953 a new club - the Scottish Gas Board (Edinburgh Division) Social Club - was formed, with an initial membership of eight hundred and sixty members. It is intended that this will become the parent body to other clubs within the division, including golf and blowing clubs.

As far as an individual undertaking like Granton is concerned, the experience of the management and men is that welfare improvements are sanctioned on a more liberal basis than before nationalisation. The procedure is for the Works Superintendent/
Superintendent to discuss with trade union representatives as to which innovation or repairs shall have priority; whether, for instance, new bicycle sheds shall take precedence over extensions to the canteen. The Works Superintendent then transmits the suggested welfare requirements to the Divisional Controller. These requests are usually granted; the reasons given on those few occasions when they have been rejected or postponed have almost invariably been based upon the difficulties of getting permits and materials for new construction and repairs. This limitation seems to be appreciated by the workers. They recognise that the slow rate of progress is due largely to these general shortages which lie beyond the control of the industry.

There is no "personal welfare service" - concerned with such matters as sick visiting, domestic and housing problems, etc., in the gas industry in Scotland, nor would the workers welcome any such service.
CHAPTER VII

The Workers' Security

Superannuation

A pensions scheme was introduced early in the existence of the Edinburgh and Leith Corporation Gas Commission, although its provisions did not begin to take effect until about 1908. It was laid down that all workmen who had been in the employ of the Commission for 20 years or more might be granted a pension as a reward for faithful service. The amount of the pension was approximately one-third of the wages received at the time of becoming incapacitated, and was not to exceed one half. The workmen were not asked to contribute to the fund in any way, the Commissioners granting it as a free gift and retaining to themselves the right to refuse the pension, or to withdraw it in the case of misconduct, to any man who, in their opinion, had not earned it by "consistent and faithful attention to his work and to the interests of the gas consuming public." The object of the scheme was to encourage competent and hard-working men to remain in the service. In order that "winter hands" could qualify, the scheme was so framed that the twenty years' service should count towards the pension for those men who had worked only a few months out of each year. A Commissioners' Provisional Order of 1902 permitted the grant of annual voluntary allowances aggregating ½d per 1,000 cubic feet of gas (about £2,000 per annum). In May 1909 a Superannuation Scheme was drawn up on a more formal basis. The actuary had reported that to put the scheme on a sound financial basis, the Commissioners would require to make a special contribution of £67,830. The Secretary of State was, however, satisfied with a deed drawn up and signed by the Commissioners, whereby they promised to contribute £2,035 (3% of this sum) annually to the Superannuation Fund. This annual contribution represented slightly under ½d per 1,000 cubic feet of gas. The age of 65 was decided upon for retirement of employees, to take effect from May 1910. In the year 1910-1911, allowances were paid, by resolution of the Commissioners, to 54 employees. The amount paid was £1010:6:11d.

The Superannuation Scheme continued throughout the war, but most of the war bonuses and war wages, 1914-1918, specifically excluded these advances from pension rights. Shortly after the end of the war the undertaking was placed directly under Edinburgh Corporation and employees were automatically included in the local authority Schemes. Henceforth they enjoyed the same provisions as such workers.

Sick Benefits

Under the National Insurance Act of 1911 gas-making was not an insured trade, but the criterion was not the business of the employer but the nature of the work upon/
upon which individual employees were engaged. The number of insurable workmen in the undertaking at this time was 718. Their contribution of 4d per week would have amounted to £622:5:4d, the Commissioners would have paid £466:14:-- and the Treasury £311:2:8d, making a total of £1,400:2:--. "If the Commissioners apply for exemption from the Act," reported the Treasurer, "they will have to pay sickness and disablement benefits for which they may be liable- at a liberal estimate, £100 a year. They will save £366 a year, avoid a vast amount of trouble and expense in collecting and accounting to the government for their statutory contributions. Employees will be relieved of over £600 per annum, and the Treasury over £300." It was also suggested that the Commissioners should apply for exemption from Part II with regard to the unemployment insurance of permanent employees who were eligible for superannuation.

A mass meeting was held at Granton Works on 9th May, 1912, at 8 p.m., and a verbatim report of this lively gathering has fortunately been preserved.

Mr. Masterton: If you accept the Commissioners' Sickness and Disablement benefit you don't have to pay. But you won't receive medical, sanatorium or maternity benefits. But some of you are members of the Granton Gasworks Sick Benefit Society and some of you may be members of other societies. There is nothing to prevent you from continuing as members of these and drawing your benefits therefrom; in addition to the Sickness and Disablement benefits from the Gas Commissioners, for which you have nothing to pay. You may also become a voluntary contributor to the act, and by payment of 7d. a week to an approved society become entitled to all the benefits under the Act, in addition to the sickness and disablement benefits from the Commissioners.

With regard to the probability of illness, there has been a Sick Benefit Society among workmen for eight years. The number of members of this society during the last three years averaged 315, and the total number of days during which men have been kept off through sickness has averaged 3½ days per annum per member. The average benefits received per member have amounted to 9/- per annum, the total disbursements by the Society being on an average £140 per year. On 718 men this would amount to nearly £320 per annum.

With regard to unemployment, the Board of Trade may exempt a class of workmen in as permanent a position as under the Commissioners - that's you. But if you afterwards get other employment, you must pay unemployment premiums. Casual employees, who do not contribute to the Superannuation Fund, must be insured under the Act.

Question: Do the Commissioners think that their scheme is going to be more beneficial to the men than that of the State?

Mr./
Mr. Masterton: Yes.

Question: Have the employees any voice in the application of the Commissioners for exemption? Can the workmen prevent the Commissioners asking for exemption?

Mr. Masterton: No.

Question: How are the discretionary powers of the Commissioners to be used? Certain individuals will get full pay while others get only the 10/-? Would a man who has drunk his savings get full pay when the inspector called and saw the state of his home and family; and a steady man because of his thrift, and clean comfortable abode, get 10/-?

Mr. Masterton: I am inclined to think that the Gas Commissioners will adopt the course of keeping the discretionary powers in their own hands and using them as they think fit.

Question: Do the Commissioners intend to give benefit from the very first day of illness?

Mr. Masterton: Very doubtful, I think.

Question: Under the Commissioners' scheme, the employee nominally gets the sickness and disablement benefits for nothing, but in reality he pays the employer's share of 3d per week by being forced into an approved society. Do the Commissioners not think that 10/- for 26 weeks and 5/- thereafter are a very small amount for this contribution when compared with what the Friendly Societies will be able to give them when their accumulated funds are released? Further, according to the memo issued by the Commissioners, their contribution under the Act - 3d per week - would come to £466:14:- whereas they state that under the proposed scheme, "at a liberal estimate" the expenditure would only amount to £100 per annum.

Mr. Masterton: He need not become a voluntary contributor unless he wish. If he is under 45 years of age, and joins before 15th January 1913, he will pay the flat rate of 7d a week; if over 45 and joins before 15th January 1913 he will pay a special rate to be fixed by the Insurance Commissioners, and if not in either of the two foregoing classes, he will pay according to his age at becoming a voluntary contributor.

John Boyd: In the event of all the employees, or a majority of them, being in favour of the State Scheme, would the Commissioners, regardless of that, insist upon exemption?

Mr. Masterton: That is a matter for the Commissioners to decide. I cannot speak for the Commissioners, but they are anxious to gauge the feelings of the men to guide them in their deliberations.

John Henry: How have the Commissioners arrived at their conclusions that the proposed scheme would be more beneficial than that of the State? We hold an entirely/
entirely different view. The Commissioners do not intend giving a doctor and medicine, and without these benefits working men are at a loss. Under the State scheme, medical benefits, drugs, etc. are all given and these are, to any workman who might be ill, more than equivalent. (Applause). The point we hold is that the Commissioners' scheme is not a fair equivalent. To safeguard ourselves under the Commissioners' scheme we would require to join an approved society and pay 7d per week, whereas under the State scheme we need to pay 4d only to secure these benefits. The Commissioners will be doing a rank injustice to their employees by seeking for this exemption if the employees do not want it. Will the Commissioners receive a deputation - we are a big body of men - seven hundred and eighteen.

Mr. Masterton: I will be very pleased indeed to lay the matter before the Commissioners.

Mark Cowe: What was the need for discretionary powers being granted to the Gas Commissioners when each and everyone's contribution would be equal? Why not pay each man just the statutory 10/- no matter what his conditions are? It will be the man who can spin the tale who will get the most.

John Henry: They should take away the discretionary power altogether.

Mr. Masterton: The Commissioners are quite entitled to do what they like with their own money.

William Dick: Yes, if the men agree to it.

Mr. Masterton: No, no.

John Henry: We must all join an approved society, if only for the doctor and medicine. If we didn't the doctor would take our 10/- and we would get nothing.

Mr. Jack (clerk to the Commissioners): If the Commissioners got exemption, the employes would get the 10/- and they would not have to pay the 4d. Why not pay 2d or 3d a week for doctor and medicine. (Cries of dissent).

John Henry: Why, if we are going to pay 3d for doctor and medicine, we need only pay another penny and secure all the benefits given under the State scheme. The Commissioners, when they considered the scheme, forgot the men's side of the case altogether. At present, this insurance act affects only one in a household, but no one could fathom how far it would reach in ten or fifteen years' time, when perhaps everybody would be included - their children and their children's children.

Mr. Masterton: I take it that you would rather be under the Act?

John Henry: Yes. The best scheme would be for the Commissioners to form themselves into an approved society and pay the Act as required. Let us accord a hearty vote of thanks to Mr. Masterton and Mr. Jack.

Mr. Masterton: It has given us great pleasure to receive such a patient and attentive/
attentive hearing. I will submit a report to the Commissioners embodying your suggestions and I trust that whatever is finally decided upon will meet with your hearty co-operation and support."

The Commissioners resolved not to apply for exception from Part I of the National Insurance Act, but they did request a certificate of exemption from the Unemployment sections of the Act. The Board of Trade replied that such a certificate could only be granted if the Commissioners gave an assurance that the workmen concerned would not be dismissed for reasons other than misconduct, neglect or unfitness for duty, and that for any of these reasons the men should have the right of appeal to the Commissioners. It was decided that an assurance could not be given to the Board of Trade, and the plea for exemption was withdrawn.

By the time of nationalisation they were receiving up to thirteen weeks' full pay, the authority contributing the difference between normal pay and National Health Insurance payments. This came into operation after twelve months' service and subject to a satisfactory medical examination. Four medical grades were introduced: A, fit for permanent work; B, temporary indisposition (e.g., bad teeth) which could be remedied with a view to upgrading; C, unfit for permanent but suitable for temporary work; D, unfit for temporary or permanent work.¹

Craftsmen covered by the agreement between the F.G.E. and the C.S.E.U. were admitted to the sick pay schemes applicable to the undertaking in which they were employed, from April 1947. This concession was, of course, of considerably greater benefit to tradesmen at an undertaking such as Granton than to men working in private undertakings where no such scheme was in operation.

Post-Nationalisation

Superannuation

Pension rights and obligations existing at vesting date were preserved by Sections 17 and 58 of the Gas Act.

17 (g) stated: Subject to the provisions of this Part of this Act, every agreement to which any undertaker to whom this part of this Act applies, was a party immediately before the vesting date, whether in writing or not ... shall have effect as from the vesting date.

58 stated: The Minister may make regulations for all or any of the following purposes, that is to say:

(a)/

¹ The protection of the Commissioners' Superannuation Fund was ensured under Section 118 (2), Edinburgh Boundaries Extension and Tramways Act, 1920.
(a) for providing pensions to or in respect of persons who are or have been in
the employment of an Area Board, the Gas Council or a Gas Consultative Council.
(b) for the establishment and administration of pension schemes and pension funds
for ... the continuance amendment, repeal or revocation of existing pension
schemes.

The Gas Council and Area Boards were authorised by the Gas (Pensions Scheme) Regulations 1949 to establish and administer new schemes, subject to the approval of the Minister. The Gas (Pensions Rights) Regulations, 1950, provided the financial machinery for the continuance of existing schemes, for the necessary transfer of sums from local authority superannuation funds, and for the maintenance of existing rights where an employee was transferred from the employment of one board to that of another. The Regulations also conferred on a member of an existing scheme the option of transferring to any new schemes established under the Pension Scheme Regulations, on such terms as should be agreed. Provision was made for the disclaiming of rights. With regard to new entrants, none could be admitted to the pension schemes. This meant, in effect, that some categories of workers who would have qualified for admission to a superannuation scheme in the days of municipal control were now ineligible because they had joined the industry after nationalisation. As far as pension rights are concerned, nationalisation has proved to be a retrogressive step for manual workers. Although the Scottish Gas Board possesses appropriate powers under the 1948 Act it has not extended superannuation schemes to manual workers.

In 1952 the Minister of Fuel and Power approved thirteen Gas Staff pension schemes (one for the staff of the Gas Council and one for the staff of each Area Board) for all full-time employees over twenty years of age "whose duties are, in the opinion of the employer, administrative, professional, technical, commercial or clerical." In effect, the schemes covered all employees coming within the purview of the N.J.C. for Gas Staffs or the Senior Gas Officers Joining Council. Employees over 55 ($50 if a woman) at the commencement of their service were not eligible for membership. Two classes of membership were established; the first covers employees who, on 31st August 1952, had no pension rights through membership of a pre-vesting scheme, or who entered the industry after 1st September 1952; the second covered employees who already enjoyed pension rights dating from pre-nationalisation. This latter category ("transferred members") were under no obligation to exchange these rights for rights in the new scheme unless they wished/

wished. Contributions of members were fixed at the following levels:

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<tr>
<th></th>
<th>Men</th>
<th>Women</th>
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<tr>
<td>On Salary up to £425 a year</td>
<td>5%</td>
<td>4%*</td>
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<tr>
<td>On portion of salary in excess of £425</td>
<td>6½%</td>
<td>5½%</td>
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*(The contributions for men are greater than those for women because of the widow's pension. This was fixed at half the amount of the pension to which the husband would have been entitled, and applies to employees with over 10 years' service.)*

For older employees it was possible to convert back service into pensionable service. Up to 20 years of back service after a member has attained the age of 20 to the earliest date on which he was eligible to join the scheme could be converted into pensionable service at the rate of one year's pensionable service for each two years of back service. To effect this conversion an employee had to pay a sum equal to 2% of his salary multiplied by the number of pensionable years applicable.

The salary computed included any war bonus and any cost of living bonus but not payment for special duties or for overtime, nor any emoluments in kind such as free house or free gas.

The Gas Board's contribution is just under twice as much as the member pays.

The annual pension for each year of pensionable service has been fixed at 1/80th of the first £425 of pensionable salary plus 1/60th of the pensionable salary in excess of £425. Special provisions are made for retirement on ill-health, on "re-organisation or through redundancy", for voluntary retirement and for retirement after normal pension age. Normal retiring age is 65 for men and 60 for women.

Interchange arrangements have been made on behalf of staffs leaving the Gas Industry to take up employment with Government Departments and Local Authorities. Members moving between Area Boards are able, of course, to retain their full pension rights under the schemes. This advantage arises from the fact that the Gas Council's influence was exerted towards ensuring that all Area schemes were identical.

Each scheme is managed by its own Committee on which the Board (or Gas Council) and the members are equally represented. Election of the Members' Representatives is by nomination and ballot by the members. A Central Committee consisting of representatives of all the Employers and of the members of each scheme has been set up to ensure co-ordination between the schemes, and to maintain identical interpretation of the rules. No resolution of either the Scheme Committee/
mittee or the Central Committee can be passed unless there is a majority voting in its favour on both the Employers and the Members Panels.

Sick Benefit

A national sick pay scheme for manual workers was agreed upon by the National Joint Industrial Council on March 1951, although its main benefit was to undertakings previously outside the scope of such schemes. Its provisions were largely already enjoyed by the Edinburgh undertaking. The scheme was to apply to employees who had completed one year's continuous service with the Gas Council or Area Gas Board, and who had been recommended by a medical practitioner (nominated by the Council or Board) for admission to the scheme. Employees suffering from sickness or incapacity attributable to their own negligence, or an accident "arising out of and in the course of employment" were excluded from sick pay. After three consecutive days of sickness, employees became entitled for thirteen weeks to a sum equal to their normal weekly wage (less national insurance benefit).1 This period of sick pay was to be the maximum in any one period of twelve calendar months. Where an employee was transferred from one Area Gas Board to another (and where there was no break in employment) he should continue to be eligible for the benefits of the scheme without further qualification. The scheme came into operation on 1st April 1951.

These conditions were extended to all craftsmen covered by the Agreement of April 1947 between the F.G.E. and the C.S.E.U. In June 1951 they were extended to bricklayers and masons (covered by the Refractory Users' Federation agreement) in the employ of the Gas Council and the Area Gas Boards. Both regular and casual workers were included. Bricklayers and masons, from the point of view of sick benefits, thus enjoy superior conditions to those employed by the private industry section of the Gas Industry.

A further matter of concern to manual workers generally throughout Scotland was the question of recompense to a manual worker who, on account of absence through sickness, could not enjoy a Statutory Holiday to which the National Agreements entitled him. The Scottish Area Council of the N.J.I.C. for the Gas Industry decided that in such circumstances an employee should receive a day's holiday with pay on a date to be mutually agreed upon after his return to work. The Scottish Gas Board emphasised, however, that the concession would not be applied to manual workers whose absence through sickness had been prolonged.

The most spectacular innovation was the Sick Pay Scheme introduced for Intermediate Grades in November 1950 by the National Joint Standing Committee for these grades. This Scheme involved considerable improvements over previous conditions/1. In some undertakings the former maximum was 2/3rds pay for 5 weeks and ½ pay for 7 weeks.
conditions for many of the employees falling within this category. The provisions for membership of the scheme were similar to those of the scheme for gasworkers, but the allowances were extended. Employees who qualified under "Conditions of Service: I" (i.e., more responsible positions) received an allowance equal to full pay for the first six months of absence, and after the expiration of this period, an allowance equal to half pay for a further period up to six months. Employees under "Conditions of Service: II" received an allowance equal to full pay for the first thirteen weeks of absence, and half pay for a further thirteen weeks. The employing authority was to have discretionary powers to extend the application of the foregoing scales in the case of an employee who had not completed twelve months' continuous service, or where entitlement to an allowance equal to full pay had ceased. Employees who were sick during the annual holiday could submit a medical certificate to this effect, thereby reckoning the period of sickness as sick leave and not annual holiday.

A National Sick Pay Scheme was brought in for Clerical, Administrative, Professional and Technical Staffs by the N.J.C. for Gas Staffs, on 28th June 1950. After laying down the usual provisions, it granted to all employees an allowance equal to full salary for the first six months of absence, and an allowance equal to half salary for a further six months (with discretionary powers of extension as for Intermediate Grades).
wished. Contributions of members were fixed at the following levels:

<table>
<thead>
<tr>
<th>Salary</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>On salary up to £425 a year</td>
<td>5%</td>
<td>4%*</td>
</tr>
<tr>
<td>On portion of salary in excess of £425</td>
<td>6%</td>
<td>5%*</td>
</tr>
</tbody>
</table>

*(The contributions for men are greater than those for women because of the widow’s pension. This was fixed at half the amount of the pension to which the husband would have been entitled, and applies to employees with over 10 years service.)*

For older employees it was possible to convert back service into pensionable service. Up to 20 years of back service after a member has attained the age of 20 to the earliest date on which he was eligible to join the scheme could be converted into pensionable service at the rate of one year’s pensionable service for each two years of back service. To effect this conversion an employee had to pay a sum equal to 2% of his salary multiplied by the number of pensionable years applicable.

The salary computed included any war bonus and any cost of living bonus but not payment for special duties or for overtime, nor any emoluments in kind such as free house or free gas.

The Gas Board’s contribution is just under twice as much as the member pays.

The annual pension for each year of pensionable service has been fixed at 1/80th of the first £425 of pensionable salary plus 1/60th of the pensionable salary in excess of £425. Special provisions are made for retirement on ill-health, on "re-organisation or through redundancy", for voluntary retirement and for retirement after normal pension age. Normal retiring age is 65 for men and 60 for women.

Interchange arrangements have been made on behalf of staffs leaving the Gas Industry to take up employment with Government Departments and Local Authorities. Members moving between Area Boards are able, of course, to retain their full pension rights under the schemes. This advantage arises from the fact that the Gas Council’s influence was exerted towards ensuring that all Area schemes were identical.

Each scheme is managed by its own Committee on which the Board (or Gas Council) and the members are equally represented. Election of the Members’ Representatives is by nomination and ballot by the members. A Central Committee consisting of representatives of all the Employers and of the members of each scheme has been set up to ensure co-ordination between the schemes, and to maintain identical interpretation of the rules. No resolution of either the Scheme Committee
mittee or the Central Committee can be passed unless there is a majority voting in its favour on both the Employers and the Members Panels.

**Sick Benefit**

A national sick pay scheme for manual workers was agreed upon by the National Joint Industrial Council on March 1951, although its main benefit was to undertakings previously outside the scope of such schemes. Its provisions were largely already enjoyed by the Edinburgh undertaking. The scheme was to apply to employees who had completed one year's continuous service with the Gas Council or Area Gas Board, and who had been recommended by a medical practitioner (nominated by the Council or Board) for admission to the scheme. Employees suffering from sickness or incapacity attributable to their own negligence, or an accident "arising out of and in the course of employment" were excluded from sick payment. After three consecutive days of sickness, employees became entitled for thirteen weeks to a sum equal to their normal weekly wage (less national insurance benefit).\(^1\) This period of sick pay was to be the maximum in any one period of twelve calendar months. Where an employee was transferred from one Area Gas Board to another (and where there was no break in employment) he should continue to be eligible for the benefits of the scheme without further qualification. The scheme came into operation on 1st April 1951.

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CHAPTER VIII.

Education and Training, and Promotion Policy

The provision by the management of facilities for education and training is a very recent development in the Gas Industry. This does not mean that there has not been encouragement to study from the earliest days. To reach the senior positions in the industry required high technical qualifications. The Institute of Gas Engineers was founded in 1902, and was concerned from the first with the education and training of gas engineers. Originally it left the actual administration of gas education to the Royal Society of Arts, and then to the City and Guilds of London Institute, but in 1907 the Council of the Institution became associated in an advisory capacity with the C.G.L.I. to determine such questions as the scope of the syllabus and the choice of examiners. In 1910, on the initiative of the Institution, the Livesey Professorship of Coal, Gas and Fuel Industries was set up at the University of Leeds in memory of Sir George Livesey. But although a highly specialised syllabus was laid down for gas engineers, there was little formal examination of lower grades. At Granton, for instance, Herring complained frequently about the inadequate technical knowledge of his foremen. Courses became available, however, at the Heriot Watt College, for instance, in Edinburgh, and certificates were established by the C.G.L.I. for gas fitters. Students and apprentices were, of course, expected to study in their own time in the evenings. Herring had been opposed to the employment of many apprentices at Granton, but his policy was reversed by Masterton who introduced them to the fitting shop. In May 1914, the District Secretary of the Amalgamated Society of Engineers (W.H. Laird) complained that the Fitting Shop had not sufficient variety of work to give boys a fair chance. The A.S.E.'s chief concern was, perhaps, not so much the inadequate educational facilities as the fact that boys were displacing journeymen (whereas there had been formerly four turners, there were in 1914 two journeymen and two apprentices). Masterton's reply was nevertheless interesting. "Few engineering shops in town," he declared, "offer greater variations of work than our own - which embraces repairs to steam, gas and hydraulic engines, locomotives, cranes, hydraulic rams and capstans and numerous other miscellaneous appliances." The A.S.E. representative met Masterton on 11th June to discuss the matter and, after visiting the shop, expressed complete satisfaction at the opportunities which existed for learning the trade.

Foremen and chargehands were generally promoted from the ranks of the labourers, although the General Foreman (whose designation was later changed to Works Superintendent) was a skilled engineer.

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1. It was Sir George Livesey who had been called in by the Edinburgh and Leith Gas Commissioners in 1897 to advise them in conjunction with Herring upon the choice of a new site, and whose recommendation "to build new works as soon as possible" had influenced them in accepting Herring's proposal of Granton.
The "Whitley Reports" gave a new emphasis to education and training. In January 1921, the N.J.I.C. for the Gas Industry discussed "whether greater and more widespread facilities for training men to occupy minor posts of responsibility, such as foremen in large works and managers of small works, and the nature of the training which should be provided." The Council went on to consider how to improve training, including pre-apprenticeship education, for skilled men occupied in distribution, and how to foster the "general educational welfare of all workers in the industry." These questions were among the terms of reference of the Educational Advisory Committee, comprising one representative each from the N.G.C., B.C.G.A., I.G.E., Board of Education and four representatives from the N.J.I.C. (two from each side of the Council).

In 1923, after close collaboration between the Board of Education, the I.G.E. and C.G.L.I., a comprehensive scheme for the education and certification of those engaged in the technical work of the gas industry was adopted. This scheme was intended to embrace both the technologist and the craftsman, thereby bringing intermediate grades into the formal examination system previously restricted to the gas engineer. The Gas Education Committee was set up (under the I.G.E.) to provide and administer a uniform educational scheme for many different types of students. The granting of the Royal Charter to the I.G.E. in 1929 led to the establishment of corporate membership of the I.G.E. as the most important professional qualification in the industry, and new regulations from time to time confirmed this qualification. At a lower standard than this (but in close liaison) the C.G.L.I. provided for examinations in the technology of Gas Manufacture and Supply. These examinations did not entitle successful candidates to membership of the I.G.E. Membership of the I.G.E. and C.G.L.I. was by direct examination and could be gained by taking approved degree or national certificate courses. These national certificate courses were flexible, and permitted the student, if the right subjects were selected, to qualify for membership of the Institution of Civil Engineers (provided the necessary supplementary examinations were taken and the necessary conditions observed) at the same time as qualifying for the Institute of Gas Engineers. Members of the industry wishing to qualify in chemistry could take either the associate examination of the Royal Institute of Chemists, or the associate membership examination of the Institution of Chemical Engineers. Alternatively, there were national certificate courses in chemical technology possession of which would count towards associateship of the R.I.C. Exemption from the associate-membership examination of both the Institution of Chemical Engineers and the Royal Institute of Chemists was normally granted to candidates possessing a degree with first class honours (or in certain circumstances, second class honours) of a British University. Members of the industry wishing to specialise in fuels could qualify for Associate membership of the Institute of Fuel by following the national certificate course suitable for membership of the I.G.E., and taking the necessary extended subjects. This required

1. Cmds. 8606 of 1917, 9001, 9002, 9099 and 9153 of 1918.
required from one to two years' additional study. Students of ordinary national certificate standard could, while qualifying for associate membership of the Institution of Gas Engineers and provided they were indentured apprentices in Gas Engineering (Supply) under 25 years of age, be eligible for graduateship of the Institution of Heating and Ventilating Engineers. In order to qualify for associate-membership of the I.H.V.E. it was necessary to take further examinations and satisfy the institution as to sufficient professional experience in either heating or ventilating.

The Gas Fitting courses which catered for examinations arranged by the C.G.L.I. were numerically the most important in the industry. The C.G.L.I. offered two distinct classes of award; the normal Gas Fitting Certificate (intermediate and final) and secondly, the same certificate plus a full technological endorsement. This required a reasonable standard of general education in addition to a full and complete knowledge of the craft of Gas Fitting.

The development and co-ordination of training facilities for gasfitters was taken further under "The Scottish Regional Gas Industrial Council Gasfitters' Classification Scheme", introduced in October 1948. The object of the scheme was to agree to qualifications, rates of pay and conditions of employment for gasfitting apprentices and gasfitters employed by member undertakings of the F.G.E. in the Scottish Region. Although the motive behind the scheme was the fixing of rates of pay commensurate to degree of skill, the consequence was to establish a scheme of training supplementary to that of the I.G.E. and C.G.L.I. It was, however, emphasised that it was not intended that "examinations arranged under the Scheme shall in any way replace or be substituted for the Institution of Gas Engineers Training Scheme but only be a method whereby a man's practical skill and theoretical knowledge can be judged for the purpose of fixing his rate of pay in circumstances where he is unable, due to absence of reasonable facilities, to avail himself of the Institution's Scheme. Both parties to this agreement are of the opinion that gasfitters shall, whenever possible, undergo instruction and examination under the Institution Scheme."¹ A Classification Scheme Board was set up by the S.R.G.I.C. to administer the scheme, arrange training facilities, appoint examiners and provide facilities for conducting examinations and trade tests. Apprentices were to be not less than sixteen years of age, and the period of apprenticeship was to be five years (it had formerly been six), with a minimum of six months' probationary period before apprenticeship commenced. For youths attending school or pre-vocational training centres after their sixteenth birthday, and prior to commencing apprenticeship, the period of apprenticeship could be reduced by an amount not exceeding this attendance period (provided it were contributory to the training of the apprentice in the craft of gasfitting). It was to be a condition of apprenticeship that the apprentice should pursue the Craftsman's/¹ The Scottish Regional Gas Industrial Council Gasfitters Classification Scheme. 1948, Clause(4.)
man's Course in Gasfitting adopted by the C.G.L.I., including attendance at evening classes (fees to be paid by the employing undertaking conditional upon satisfactory progress and attendances). If these facilities were not available, the undertaking would be obliged to provide facilities to apprentices to attend the Classification Board Scheme courses, paying wages, travelling expenses and subsistence allowance. This scheme would provide individual trade tests. Undertakings agreed, under this scheme, to "afford the apprentice every reasonable opportunity of becoming a highly skilled and knowledgeable tradesman". Apprenticeship could be terminated and the apprentice discharged at any time for unsatisfactory attendance at classes, or for misconduct, bad timekeeping or for any other "sufficient reason". On the completion of five years' apprenticeship, the youth was to be given a certificate to this effect, and was to be classified as a Grade II Gasfitter (and thereby eligible for the appropriate rate of pay.)

The S.R.G.I.C. put an end to many years of controversy at the Edinburgh undertaking by laying down the precise definition of gasfitter grades. A Grade II Gasfitter "is an able bodied workman of twenty-one years of age or over who has served a five years' apprenticeship in Gasfitting, or who is a craftsman in any other comparable craft who has served a full time apprenticeship in that craft and is accepted by a Gas Undertaking as a gasfitter".

A Grade I Gasfitter "is an able bodied workman who:-
(a) has served two years as a Grade II Gasfitter, and
(b) shall have passed the final grade examination of the C.G.L.I. in Gasfitting, and shall have been recommended by an examiner appointed by the Classification Board for acceptance as a Grade I Gasfitter following personal examination of work carried out as possessing skill of the standard appropriate to such grade, or
in the absence of facilities for pursuing that course, shall have passed the examination for Grade I Classification under the Scheme, and
(c) has by his everyday work on the district proved himself capable of executing all kinds of work for which a high degree of skill and knowledge is required and of supervising such work satisfactorily, or
(d) shall not be less than thirty years of age at the date of inception of the scheme and shall have been employed at that date for a period of not less than seven years upon all kinds of gasfitting work for which a high degree of skill and knowledge is required and shall be capable of supervising such work satisfactorily, or
(e) shall have been recommended by an examiner appointed by the Classification Scheme Board for acceptance as a Grade I Gasfitter following personal examination of work carried out as possessing skill of the standard appropriate to such grade.

... Upon/
... Upon fulfilling the appropriate foregoing conditions stated for qualification as a Gasfitter Grade I or Grade II each gasfitter shall receive a signed certificate from the Classification Scheme Board stating in which Grade he has been placed, the date of such placing, and the qualifications by virtue of which he has been so graded."

The administration of examinations was among the duties of the Gasfitters Classification Scheme Board which consisted of five members representing employers and employees. A gasworker wishing to enter for an examination was required to make written application to the management of the undertaking. The Management was responsible for ensuring that the candidate was eligible, and the application was forwarded to the Board. If an applicant failed, he could apply to be re-examined at the next examination, provided, however, that no employee could make more than three attempts except with the written consent of the Board. Examinations were arranged at intervals of not less than six months and the examiner appointed by the Classification Scheme Board (from their Panel of examiners) was in no circumstances to be an officer of the candidate's own undertaking. Examinations consisted of written, oral and practical tests (20, 20 and 60 marks respectively, making a total maximum mark of 100) and the candidate was required to pass the examination as a whole and not in parts. The minimum pass standards were 10, 10 and 45 marks respectively. Certificates in accordance with schedules A-B-C were to be issued by the Board.

Undertakings agreed to make the same concessions to Grade II gasfitters as they made in the case of apprentices taking examinations. These men were to be allowed to attend courses at training centres sponsored by the Classification Scheme Board, and the undertaking paid their normal wages, subsistence allowance and travelling expenses.

The same conditions were to be observed with regard to special refresher and instructional courses arranged from time to time at the training centres for both grades of gasfitter. It was to be a condition of employment from this time onwards that employees must attend such refresher and instructional courses when instructed by the employing undertaking.

Following the recommendations of the N.J.I.C. for the Gas Industry, the I.G.E. eventually established a "Certificate in Gas Salesmanship and Consumer Service" which soon became a desirable qualification for the distributive side of the industry. For the "home service" the Gas Education Committee suggested that candidates should hold first class certificates in plain cookery and in house-craft, to the C.G.L.I. standard. On their acceptance, such candidates were to undergo a course of specialist training in order to acquire technical knowledge peculiar to the gas industry.1

The/1

The Edinburgh undertaking was a pioneer in providing formal job training for salesmen. In May 1923 it set up a scheme whereby boys of sixteen could undergo an apprenticeship of five years' duration.

On the secretarial and accountancy side of the industry, the student had a wide choice of professional bodies, well catered for at most commercial colleges by evening courses. The clerical and administrative employees at Edinburgh were not given facilities for training, but they were offered inducements (in the form of increments to their salaries) to study in their own time for diplomas and degrees. The degree of B.Com gained in this fashion, was a popular qualification among the clerical staff.

The War (1939-1945) gave an impetus to education and training in the form of refresher courses. The I.G.E. organised refresher courses for gas engineers serving in the forces. Two six monthly periods of theoretical training were to be provided at a technical college and one six monthly period of training at a Gas Undertaking. Two trainees were accepted under this scheme by Granton. The courses were not available, however, for lower grades.

Post-Nationalisation

The nationalisation act stated: "... it shall be the duty of every Area Board, in consultation with any organisation appearing to them to be appropriate, to make provision for advancing the skill of persons employed by them, including the provision by them and the assistance of the provision by others of facilities for training and education. Every Area Board shall, from time to time, on being so required by the Gas Council, submit to them programmes showing the provision to be made by them under the preceding subsection, and the Council shall co-ordinate those programmes and settle from time to time in consultation with the Minister a general programme, with respect to the provision to be made by the Area Boards as aforesaid, and the Area Boards shall give effect to the programme so settled."

These obligations were included in the functions of the various National and Area Joint Industrial Councils.

In pursuance with Section 4 of the Act, the Industrial Relations department of the Gas Council appointed an Education Sub-Committee, and three representatives were invited from the I.G.E. This committee existed side by side with the Gas Education Committee of the I.G.E., and there was some controversy about the exact nature of the I.G.E.'s relationship with the Gas Council. Previously the I.G.E. received its funds from hundreds of industrial firms, whereas not it was financially dependent upon one employer. The magnificent/

2. N.J.I.C. for the Gas Industry, Clause A/1/(f) and Area Council, Clause A/2/(a)
   N.J.I.C. for Gas Staffs, Clause II/4 and Area Council, Clause 1(e).
magnificent new headquarters of the I.G.E., completed in 1950, testified to the generosity of the subsidy. The question in the minds of many gas engineers, however, was whether the I.G.E. would be able to resist pressure from the Council. Would educational standards, for instance, be tailored to meet the policy requirements of the Gas Council? One controversial topic was what emphasis should be given in the I.G.E. syllabus to general engineering and chemical engineering respectively. So far, there seemed to have been no attempt by the Gas Council to reduce the professional independence of the I.G.E., although the national technical press commented with some alarm on the fact that the last two presidents of the I.G.E. had been a Chairman and Deputy-Chairman respectively of Area Boards, thereby affording the possibility of unofficial pressure which short-circuits the legal relationship between the Institution and the Gas Council.

"The President speaks as President of the Institution of Gas Engineers but it is impossible to forget that he is also Chairman of an Area Board."

On the credit side, there remained the fact that educational schemes, prepared by the I.G.E. requiring heavy expenditure, involved enlisting the support of only one employer, and obviated the need for canvassing hundred of firms for financial backing. One large project discussed in 1951 was the establishment of a national college for the Gas Industry, complete with a modern, well-equipped manufacturing station, and the setting up of district repair shops under the control of this college.

In spite of much constructive discussion criticisms of the constitution of the Gas Education Sub-Committee continued throughout 1950 and 1951. In Scotland the Area Gas Board annoyed its staff by declaring that "the question of education is not a matter for negotiation with Trade Unions or Staff organisations." The high-handedness on the part of the Board did not apply to the Gasfitters' Training Scheme which was administered jointly by the Board and by the workers' representatives on the Scottish Regional Council. This agreement, as we have seen, dated from the pre-nationalisation era, and the staffs donated a similar measure of consultation to that afforded to gasfitters. The Board finally agreed that three representatives from the Staffs' side of the Area Council for Gas Staffs should be consulted on the scheme for further education which the Board at that time was preparing. But meanwhile, reorganisation was going on at national level.

In 1952 the Education Sub-Committee of the Industrial Relations Committee of the Gas Council was abolished, and its place taken by an Advisory Committee on Education and Training. This new committee was directly responsible to the Gas Council. Membership of the new body was considerably wider than that of the former sub-committee. Henceforth it was to consist of the following representatives:

Chairman

1. The "Gas World". 10th June, 1951.
Chairman: Deputy Chairman of the Gas Council.
Members: One member from each of the Area Boards and from the Gas Council; Three members nominated by the Institution of Gas Engineers; One from the Ministry of Education; Three from the workers' side of the N.J.I.C. for the Gas Industry; Two from the Staffs' side of the N.J.C. for Gas Staffs; One from the Officers' side of the Senior Gas Officers' Joint Council; One from the Confederation of Shipbuilding and Engineering Unions; One from the Amalgamated Union of Building Trade Workers, representing building trade workers in the Gas Industry;
Joint Secretaries: Assistant Industrial Relations Officer of the Gas Council and the Assistant Secretary of the Institution of Gas Engineers.

One of the first acts of the new committees was to prepare a general programme of education and training. It was approved by the Gas Council and submitted to the Minister of Fuel and Power on 10th March 1952. The Council was notified that the Minister had approved the draft, and it was sent out accordingly to each area board to serve as a guide on general educational policy.

The Education and Training programme evolved by the Gas Industry since nationalisation can be considered under three main headings: facilities to be offered by Area Boards to employees in regard to further education; pupillage schemes; and vocational training.

The facilities offered for Further Education of employees in Scotland (following in broad outline the national recommendations) were contained in a memorandum issued by the Scottish Gas Board in 1952:

"The Board offers to its employees the following educational facilities in order to assist and encourage all employees to follow courses of study whereby they may add to their knowledge and competence, that they may fit themselves for positions of responsibility.

The Scheme should not be regarded as final. It may be extended or amended as opportunity affords and occasion demands.

Courses of Study

Wherever possible it should be the aim of employees to obtain a professional, technical or trade qualification.

Courses of study which require the prior approval of the Board must have a bearing on the work covered by the Department of the Undertaking in which an employee is working or likely to work in the future, and must be followed at the College or School considered by the Board to be most appropriate.

A list of appropriate courses is appended.1

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1. See Appendix No. II(b) Page 582.
It is appreciated that other courses of study may be required by students and, on application, the Board will consider such courses.

Although training by means of Correspondence Courses is generally not recommended, particularly where technical subjects are concerned, it is recognised that there are cases where no suitable alternative is available. Permission to study by means of Correspondence Courses may be given in special cases, only where employees are unable to take a Course or Subject at a suitable College. In cases where permission is given, the Board will refund in respect of fees proportionate amounts up to 50% of the total Course fees paid by the student, on production at each stage of a Progress Report from the Correspondence College concerned that the student has carried out his studies diligently and satisfactorily. The Board will refund the remaining 50% after the student has passed the examination appropriate to his approved course of study.

Where the Board approves a course of study by correspondence, arrangements will be made wherever possible for a senior officer to supervise the student's training.

Facilities which may be granted

To qualify for any of the facilities or payment provided under the Scheme it shall be a condition that the employee:

(a) Carries out his duties in the industry with diligence to the satisfaction of the Management.

(b) Makes not less than 80% attendance if attending an Institution of Further Education. Reasonable allowance will be made for sickness and unavoidable late work.

(c) Receives a satisfactory terminal report from the College.

(d) Sits for any appropriate terminal and sessional examinations conducted by the College.

Subject to the above conditions the following concessions will be granted:

**DAILY-TIME RELEASE**

In general, leave with pay for one day per week for continued education will be granted to the following:

(i) All juvenile employees up to 18 years of age

(ii) Apprentices and Staff Trainees whether or not they are over 21 years of age

(iii) Any employee not over 21 years of age who has embarked upon a course of study approved by the Board as appropriate to the individual.

(iv) To employees over 21 years of age, only in special circumstances and at the absolute discretion of the Board.

**Notes**

All students granted the privilege of attendance at Colleges or Schools of Further Education during working hours will normally be expected to attend Evening Classes at least/
least two evenings per week. In exceptional circumstances this condition may be waived.

Course Fees at Technical Colleges and other Educational Establishments will be refunded to the student on receipt of a satisfactory report from the Educational Establishment concerned to show that the student has complied with the necessary conditions with regard to attendance.

Supplementary Fees such as Registration Fees, Laboratory Breakage Fees etc., where payment of such Fees is a condition of attendance at the College will be refunded.

Travelling Expenses incurred in attendance at Classes which are more than ten miles from the student's place of residence and employment will be paid.

Reasonable time off will be allowed where that is essential to ensure punctual attendance at Evening Classes.

Attendance at Examinations will be regarded in the same way as attendance at Classes, i.e., leave with pay and the refund of reasonable out-of-pocket expenses.

Examination fees will be refunded provided the student sits the Examination. In the event of failure the refund of Fees for subsequent entries will be considered on the merits of each case.

The pay to be granted during the periods when students are on leave for the purpose of attending classes or examinations will be based upon their normal wages or salaries without overtime rates or special bonuses.

Text Books

Arrangements will be made for the purchase of necessary text books and drawing instruments and for the repayment therefore by the student in instalments.

Refresher Courses and Conferences

There are arranged from time to time by Universities, Technical Colleges and Professional Institutions series of lectures of a specialist or postgraduate nature, which are particularly interesting and valuable to fully qualified personnel working in the field concerned. The Board may select employees to attend these lectures or Conferences from time to time, and will pay the fees and out-of-pocket expenses of and grant leave of absence with pay to such employees.

RELEASE OF TRAINED PERSONNEL WHO TRAIN OTHERS

(i) Lecturing at Technical Colleges

Where the Board consider it practicable, leave will be granted to specialist lecturers in technical subjects appropriate to the industry, to assist the Technical Colleges.

(ii) Attendance at Short Courses

The Ministry of Education arranges annually a number of Short Courses (generally of from 7 to 10 days' duration) which are specially designed to acquaint specialists lecturing/
lecturing in technical subjects with the general principles and technique of teaching. The Board desires to encourage the attendance of lecturers at these Courses and, subject to approving an employee's attendance, will grant leave of absence with pay, and also pay such out-of-pocket expenses incurred not otherwise recoverable.

**Leave of Absence for Scholarships**

The Board may grant leave of absence without pay to any employee who is awarded a Technical State Scholarship (or any similar Scholarship) granted to students who are employed in Industry, and who have attended a Technical College part time for two years to enable them to complete their training on a full time basis at a University.

There are conflicting opinions as to how generously the Scottish Gas Board has implemented this Further Education scheme. According to an official of the Edinburgh Division, "Considerable encouragement is given to all employees wishing to attend Technical or Commercial Colleges by the Scottish Gas Board. Payment of class and examination fees and where necessary, the operation of day release schemes, should act as incentives to many employees who are anxious to qualify themselves for positions of greater responsibility."

And Mr. Charles Murdoch, a member of the Board, has informed the Gas Council that Scotland "is carrying out the Further Education scheme in spirit and letter."

This latter statement was commented upon with some cynicism by another Board official who pointed out that in the case of employees over 21, not more than three applicants out of ten have so far been given permission to attend day classes. The policy is not to grant permission if the course can be taken in four evenings instead. Applications from employees over 21 are considered at a full Board meeting, and cannot be authorised by any lower formation. The criticism of one young employee was that the old engineers who had come up the "hard way" by night school, thought that the youngsters should do the same, and withheld authorisation to attend day classes. Another youth stated that the Board members apparently did not appreciate how injurious it was to his health to work all day at the gasworks and study at nights. One day off for classes would have made all the difference.

There is no appeal against the Board's decisions upon educational matters, as they are regarded as falling outside the scope of negotiation with the unions. In any case, the young men concerned belong to the technical unions and, as future managers of the industry, are reluctant to press their claims. Once an application has been refused they prefer to drop the matter. The emphasis of the Board has been on the fact that the scheme is "a privilege and not a right."

A/

A more serious criticism is that many employees do not know exactly what educational facilities are open to them. According to the Board official quoted above, insufficient publicity has been given to the scheme. While the Board has not suppressed information it has not gone out of its way to stimulate demands for the various facilities offered.

Since the scheme came into effect only one scholarship has been granted by the Scottish Gas Board. This was to enable a young graduate to spend two years at Leeds University on gas research. The award was £240, but the relevant Board minute did not make it clear whether this sum was per year or for the full period of two years. Various officials took opposing sides over the interpretation of the minute, but the Board finally decided that it had meant £240 for the two years (i.e., £120 per annum).

**Pupillage Schemes**

The recommendations of the Gas Council with regard to Pupillage Schemes fell under two headings: provision for personnel recruited from universities; and provision for those recruited from secondary technical schools, grammar schools, or public schools. Under the former heading, it was recommended that pupillage schemes should be designed to give practical experience of all aspects of the industry with which the pupils were most likely to be ultimately concerned, and that for this purpose a pupil should spend a few weeks in each department that had a bearing on his profession. With regard to secondary technical schools, etc., it was suggested that recruitment should be encouraged from 17½ to 18½ years of age, regard being had to the effect of military training under the National Service Acts. The schemes of pupillage were designed to give the greatest amount of practical experience according to the positions for which the young men were to be trained, and at the same time the pupils were to be given encouragement to study for higher qualifications by part-time and evening attendance.

The suggested total training time for a staff pupil, which was originally three years, was reduced to eighteen months in view of the duration of compulsory military service. The training scheme covers the following suggested periods:

- **Comprehensive Introductory Course at a Training Centre**, including visits to all departments of the Board: 1 month
- **Technical Training at training centre**: 3 months
- **Practical work in the district alongside craftsmen**: 4 months
- **Intensive Course in Commercial Practice**: 1 month
- **Instruction in industrial development and laboroties**: 2 months
- **General Administration**: 1 month
- **Periods with each branch of the Divisional organisation**: 6 months

\[18\text{ months}\]

This scheme is in operation in the North Thames Gas Board, but has not yet been applied in Scotland. In the North Thames Area the staff pupils simultaneously attend part-time classes to study for the associate membership of the Institution of Gas Engineers. After completion of training, pupils are posted to a staff appointment for
a probationary period of six months, and if they prove satisfactory, the appointment is confirmed. During the eighteen months of pupilship an allowance at the rate of £275 per annum is granted to the pupil. The pupil can then enter various channels of promotion, e.g., one which leads him to the post of supervisor at a salary of £750 or thereabouts. In Scotland it is left to each Divisional Controller to make individual arrangements for affording experience to pupils (called "Technical Trainees" by the Scottish Board) under his jurisdiction.

Reports are submitted regularly by Divisional Controllers to the Scottish Gas Board, but there is no central direction or co-ordination of training. Excerpts from three such reports are quoted below:


"During his period with the Maintenance Fitters he has been provided with the opportunity of seeing all kinds of plant under repair. In the laboratory he has picked up quickly all the usual routine tests. He has also gained a fair understanding of straightforward retort house controls (C.V. temperatures) and it should be said that he adapted himself readily to this particular type of work.

He is still very much lacking in experience, and as a consequence, will require a further period under suitable supervision."

C --- D ---, age 23, B.Sc. (Civil Eng.), Aberdeen University.

"Details of technical duties on which engaged:

<table>
<thead>
<tr>
<th>Department</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory, Carbonising and Ancillary Plants</td>
<td>9 months</td>
</tr>
<tr>
<td>Travelling Laboratory</td>
<td>1 month</td>
</tr>
<tr>
<td>Coal Testing Plant</td>
<td>3 months</td>
</tr>
<tr>
<td>Drawing Office</td>
<td>2 &quot;</td>
</tr>
</tbody>
</table>

He has made good progress, is capable of carrying out all routine works and laboratory testing, and shows a good grasp of the duties required."


"General works training (all routine laboratory work, control of C.V. etc. Control of vertical retorts heating system, supervision of ancillary purification plant) | 8 months|

Distribution Department (mainlaying, main and service work, installation of industrial equipment, control of District pressures) | 5 "     |

Drawing Office (general Drawing Office experience) | 4 "     |

Has shown great promise."

The reports from Divisional Controllers throughout Scotland show wide variations in the period by trainees spent in the various departments, and in the thoroughness of supervision. Some contain detailed observations upon each aspect of the man's work, and others/
others only the most general comments.

The Gas Council has also suggested pupilage schemes for those intending to specialise on the administrative or secretarial side. These also fall into two categories, comprising, in the first class, University graduates or young chartered or incorporated accountants who might be recruited immediately they had qualified, and in the second class, recruits from grammar or public schools.

It was suggested that the appropriate pupilage for the young chartered accountant might be of three years' duration, during which period he should spend a few months in each of the Rental department, the Prepayment Meter department, the Legal department, the Secretary's department, the Industrial Relations and Welfare departments, and the District and Works Offices. These pupils would be advised to enter for the examinations of the Institute of Cost and Works Accountants.

For those pupils coming from school it was suggested that they should be selected after one year's service in the General Office of an Undertaking, during which period they would normally have been engaged upon the routine duties of an office junior. The pupilage of suitable juniors would be for five years, and would include periods of training in the various departments. The pupil might also, with advantage, spend a short time on the district acting as a mate to a trained fitter in order to acquire a general idea of district work. In addition, he should spend a few weeks at a works where he could acquire some knowledge of the production and purification of gas and where he could, in particular, study the works' cost accounting system.

The pupil should at the same time be studying for the appropriate qualifications by part-time attendance on one whole-day and at least two evenings per week at a Technical or Commercial College.

These schemes have not been adopted by the Scottish Gas Board. It is left to Divisions to make their own arrangements. The Edinburgh Division has so far done the most in adopting some of the Gas Council's suggestions, although there is no formal scheme.

Vocational Training

(a) Apprenticeship Training

The most important item under this heading is apprenticeship training. This was developed and co-ordinated just before nationalisation, under the Scottish Regional Gas Industrial Council Gasfitters' Classification Scheme (1948), details of which have already been given. This scheme, however, left it to individual undertakings to decide the precise nature of training offered; their obligation, as laid down in the scheme, was merely "to afford the apprentice every reasonable opportunity of becoming a highly skilled and knowledgeable tradesman." (See Page 390)
The Edinburgh Undertaking honoured this obligation, and it must be borne in mind that the facilities described below anticipated the recommendations of the Gas Council, although they have been improved in some directions since nationalisation.

The Edinburgh Undertaking now admits eight apprentices a year to meet its technical requirements. It is a condition of their apprenticeship that these boys should attend and qualify in the City and Guilds scheme for the Technological Certificate in Gasfitting, and this condition is adhered to with the utmost rigour. The boy normally starts work at just over 15 years of age and is employed as an office boy and messenger until he begins his apprenticeship on his sixteenth birthday.

He spends the first three months in the General Stores, learning the names of the various fittings and tools, and becomes familiar with the various forms which authorise the issue of materials. He then moves to the Training Centre for the next three months where he is taught how to handle tools correctly, and the detailed operations of pipe jointing, bending and fittings, and the construction and maintenance of the common types of appliances. At the conclusion of this period, he is given a practical test before being passed to the Gasfitting Departments. He is then placed for periods of three months with selected gasfitters for the next three years.

At this stage in his apprenticeship he is transferred to the appliance workshops where he is given an insight into the reconditioning of appliances, tinsmith and brass-finishing work, and meter proving. After three months on this work he returns to the Training Centre for a final three months' course in advanced gasfitting. During this period he will also be engaged on dealing with "awkward jobs." This is an ingenious idea of the Divisional Distribution Engineer of the Edinburgh division, whereby the district maintenance men and gasfitters refer particularly awkward tasks to the Training Centre. The Training Officer passes these jobs on to his Practical Instructor, who supervises their operation by apprentices.

Another task which the fourth year apprentice carries out in the Centre is the production of a complete section of a gas appliance, with all the various gas and water ways appropriately coloured to indicate the flow. This device might suggest useful ideas to Keynesian economists in search of new models. The fourth year apprentices also spend three months in the Mines and Services Department.

In/1.

1. The permanent staff of the Edinburgh Training Centre consists of the Training Officer and the Practical Instructor. Every month a District gasfitter is allocated to the Training Centre where he is employed on productive work (e.g., overhauling of appliances) and on the "awkward problems" passed to the Centre for attention. In this way the Edinburgh undertaking has steadily built up a force of fully trained gasfitters who have had specialist training in highly skilled and complicated tasks.
In this way, the equipment of the Training Centre is steadily increasing and coloured sections of all instantaneous water heaters commonly used in the district are available for the training of future entrants. While serving his apprenticeship, the boy attends evening classes on three nights per week during the winter period. The course designated is the City and Guilds syllabus for the award of the full Certificate in Gas-fitting, and a clause in the indenture agreement binds the apprentice to attend and qualify in the specified classes.

The apprentice's fifth year is spent on the district, doing reasonably simple gas-fitting work.

Since nationalisation the training facilities described above have been thrown open to all undertakings in the South East Division as well as the Edinburgh Division. Thus apprentices of many undertakings in the Lothians and the Borders are permitted to attend evening classes, but the distances involved have prevented full use of all the facilities.

It must be remembered that these facilities are not representative of the gas industry in Scotland. Apart from the Edinburgh Training Centre the only other one under the administration of the Scottish Gas Board is at Glasgow. Employees at other gas undertakings are dependent upon whatever facilities the managements are able to introduce. This local responsibility for the training of gasfitters (up to Grade I level) has resulted in wide variations in standards. According to a member of the Joint Panel administering the Scottish Gasfitters' Classification Scheme, there is an alarming disparity between the skills acquired by Edinburgh gasfitters and gasfitters from small undertakings (particularly from the far North). This member was strongly of the opinion that training centres should be set up in every Division in Scotland, and that Divisional Education and Training Officers should be appointed. This has been done, for instance, in the North Western Area Gas Board. The trade unions have also been pressing the Scottish Board to introduce improved education and training facilities.

The Board's reply was that apprenticeship schemes were under consideration, "but because of the structure of the Gas Industry in Scotland geographically they will take some time to develop." It also pointed out in reply to a request that Board officials should tour all Scottish undertakings to inspect gasfitters' training facilities, that such a tour would be infringing the autonomy of each undertaking to devise a programme best suited to local conditions.

In spite of the difficulties of dispersed undertakings, it is doubtful how valid is the "geographical" argument. In spite of wide variations in local conditions in the coal industry, for instance, arrangements have been made for entrants to special training pits. And to bring the analogy nearer home, the problem has been solved by other Area Gas Boards/1.

Boards by such devices as travelling instruction units. This course has been urged upon the Scottish Gas Board by one of its divisional officers. In time, however, the difficulties of training will be lessened by the concentration of gas supply at a smaller number of large undertakings throughout the country.

For the ambitious apprentice the attainment of his top-grade gasfitters classification is not necessarily the end of his progress, although in practice most young men stop at this level. But an apprentice can, if he wishes, enter the course for the Associate membership examination of the Institution of Gas Engineers (the highest professional qualification in the industry). Since nationalisation one former gasfitting apprentice-ship at the Edinburgh Undertaking has been elected an Associate Member, and others are progressing on similar lines.

Apprentices who cannot quite attain to this level can enter for the Certificate in Gas Technology (Supply) which is the recognised technical qualification for promotion to District Inspector or Foreman (they are, of course, eligible for the further education awards and facilities described in a previous section) or, alternatively, they can go on to qualify for Gas Salesmanship and Consumer service certificates.

Maintenance Men

These men are drawn from the ranks of the unskilled. In the distribution side of the Edinburgh Undertaking the entire intake of unskilled labour is directed to mainlaying squads. The first few days eliminate a considerable number of men who are not suited to the conditions of the job or find the work for one reason or another uncongenial. The mainlaying squads thus act as initial filters, throwing out the men who are not likely to settle down to this type of work, and retaining those who reach an acceptable standard. The men who survive this initial period form the labour force from which maintenance men, appliance repairers and similar semi-skilled workers are drawn. The initial period has proved that the man from the mains squad is prepared for hard physical work and will find that any of these advanced jobs offers better conditions and less effort than wielding a pick and shovel in a never-ending trench. The majority of vacancies occur in the main and service layer, and maintenance men's grades and, to qualify for these positions, candidates must attend full-time courses, each of approximately three weeks' duration, in the Training Centre. These courses are strictly practical in nature.

Let us see how the main and service layers receive their vocational training. Immediately adjacent to the Training Centre is a piece of open ground where, in the course of instruction, "live" mains are laid, service connections made, and service pipes run to various/1

1. Between January 1946 and January 1953, 1,800 men entered the Mains Department of the Edinburgh undertaking, and 1,500 left without further progress, the great majority leaving within a very short time.
various points by the trainees. Escapes are left on buried pipes, and the appropriate methods of location and repair are demonstrated and then performed by the trainees.

In the final week of the course, the Instructor arranges to take over various groups of jobs from normal district allocation and the trainees carry out the installation of new services, repair and branding of mains, and other similar work on the district under the supervision of the instructor. In this way they get a thorough insight into the snags which can arise, and the method of overcoming these difficulties.

At the conclusion of the course, all the trainees who have made satisfactory progress are allocated to the various districts, each controlled by a District Representative (Mains). The majority of these representatives have been products of the "hard school" and they include men who, when they started at the bottom of the ladder with the Edinburgh Undertaking, were miners, engineers, and shipyard workers as well as plumbers and gas-fitters.

Refresher Courses

During the winter months groups of gasfitters and maintenance men attend the Training Centre every Saturday morning. Various courses are run to meet the demand for refresher courses; maintenance problems and the introduction of new appliances are among the topics chosen. Each course consists of an introductory talk, followed by discussion and finally by practical work on the subject of the course. Many problems have been brought to light during these courses, and in this way an excellent two-way channel has been developed between management and men for the speedy transmission of advice and information.

It was the experience of the Edinburgh Divisional Distribution Engineer that the men were initially suspicious of attending classes, particularly the older Edinburgh employees. But when they discovered that they were not receiving formal lectures by "backroom boys", they entered into the discussion with considerable enthusiasm. According to Mr. Denoon, the introduction of the training programme "marked a turning point in the development of our undertaking. We gained the confidence of our employees and we jointly laid the foundation stone for a more efficient and understanding relationship between management, men, and consumers ... many very useful suggestions for increasing efficiency and output have emanated from this course."

Mr. Denoon's evidence emphasises the point, made elsewhere, that the value of educational and training schemes goes far beyond the mere provision of basic skills.

Miscellaneous Educational and Training Facilities

With regard to vacation employment in the Gas Industry it was decided to draw the attention of students of universities to the opportunities which are available to them for careers in the gas industry and to enable them to obtain first-hand knowledge of the industry/I.

industry. Area Boards were asked to provide each year facilities for a certain number of graduates or undergraduates to work during the long vacation in various departments.

During 1952 the first representative of the Gas Industry attended the Administrative Staff College at Henley-on-Thames, and arrangements were made for officers to attend subsequent courses at the college.

At the invitation of the Ministry of Labour and National Service, the Gas Council joined with other nationalised industries in an examination of the problem of selection, education and training of supervisors and potential supervisors. The examination was confined to supervisors in the manual and operational grades up to and including the level of foreman. Although progress has been made with a scheme for "Training Within Industry for Supervisors" nothing much has yet been done in practice.

The Advisory Committee on Education and Training showed considerable initiative in 1952 by persuading a number of professional and educational bodies to amend the regulations governing their examinations in order to make them appropriate for students in the nationalised gas industry. The Chartered Institute of Secretaries agreed to include papers on the Law of Gas Supply in its final and intermediate examinations; the Institute of Municipal Treasurers and Accountants agreed to include two specialised papers to meet requirements of trainees in the Finance Departments of the Gas Council and Area Boards.

There is no industrial education carried out by the Scottish Gas Board, to acquaint their employees with the problems and organisation of the industry. The view of the Establishments Officer is that, as far as education is concerned, "we are concerned with improving technical skill." For education of a wider kind, employees "can go to evening classes ... the W.E.A., for instance."

No special courses are run to show employees their new rights and duties under nationalisation, comparable with those run by the British Electricity Authority for Station Superintendents, or by the Scottish Division of the National Coal Board at Newbattle Abbey.

No activities of this kind are undertaken by the Gas Council on a national level, although one area board - the North Thames Gas Board - issues a "Handbook for Employees" to all manual grades, describing the aims and organisation of the industry. In addition, new entrants are given short talks, introducing them to the Board and their new job.

In addition to the formal education schemes of the professional and trade organisations of the gas industry, a valuable educative contribution has been made by voluntary associations and discussion groups. The Waverley Association of Gas Managers was founded in August 1861 to discuss technical, scientific and administrative problems of gas managers in the Waverley area. Among topics discussed at the earlier meetings were Sunday/
Sunday labour, retort-house economies, purifiers, the price of coal, and the Menace of Electric Lighting in Border Towns. By the end of the first war the managers were discussing such subjects as residual products, fuel economy and gas services in national housing schemes. Papers and discussion reached a high level of technical and scientific knowledge, and were frequently reproduced in the national technical press. The association was particularly useful in bringing together manager from a variety of undertakings, large and small, private and municipal. Not all the activities of the association were pedagogic. Referring to a meeting held in North Berwick in 1905, the minutes record that "retiring to the Royal Hotel, the Company to a number of 53 dined together, and after the usual toasts and votes of thanks, the company got home as best they could."

One interesting feature of this association is the hereditary nature of gas management (particularly in the private companies). Some families were represented among the membership for three generations.

The last annual meeting of the Waverley Association was held in the North British Station Hotel, Edinburgh, in June 1951. At this meeting it was resolved that the association should amalgamate with the North British Association of Gas Managers (the other Scottish organisation, which had been founded in 1862 and which held its last meeting at Ayr in 1951) to form a new association to be called "The Scottish Association of Gas Managers." This amalgamation had taken place on the "advice" of the Scottish Area Gas Board, but there was strong criticism from some members, notwithstanding the assurance of Sir Andrew Clow (the Chairman of the Scottish Gas Board) that "it was good to have in mind in the memory of the past, and the work done by previous generations in the Association." One member alleged that "nobody with any respect for tradition could but deplore the passing of the Waverley Association."

One suggestion was that the new association should become a district section of the Institution of Gas Engineers, and that the title "engineer" should be included in the name of the Association. Members who were chartered gas engineers felt that the name "Scottish Association of Engineers and Managers" conveyed a professional significance which an association of plain gas managers lacked. Sir Andrew Clow resisted this suggestion, declaring that in his opinion management was a more intricate task than engineering. Technical skill called for a high training, admittedly, and he wished to see the association encouraging younger men in the pursuit of knowledge and qualifications. Much depended upon technical gifts and knowledge, but conclusions in engineering depended on facts which could be calculated and put down on paper. Administration, on the other hand, involved a large element of personal judgement and personal relations. Members of the association were, in effect, sharing their minds and outlook with a group of others working with them, and they were sharing their results and experience with a public which did not consist of a statistical group but of living men and women. "You will not, I hope/
hope, think me biased by my own experience," declared Sir Andrew Clow,1. "if I say that while I attach great value and respect to engineers, I regard the duties of a manager as generally more difficult, more personal and more exacting than those of an engineer. It is on high qualities of management, even more than on high technical capacity that the industry depends."

Sir Andrew Clow's definition of "management" is narrower than that provided, for instance, by the I.C.E.2. which states:

"Management is a function of manufacturing art and scientific method, by which products are made of the highest quality, plant is operated at its optimum capacity, processes are controlled to yield maximum efficiency but with the minimum of costs, and such understanding exercised towards the staff and workpeople that they voluntarily impart to their work the greatest possible effort without any adverse effect on health or harmonious relationships between all levels in the organisation."

Sir Andrew's aim was apparently to concentrate the attention of gas managers more upon "human" problems in their lectures and discussions at association meetings. This is in accordance with his view (expressed privately) that chartered gas engineers are not always good administrators, and that it might even be necessary in some appointments to sacrifice technical ability and qualification to administrative ability, where these qualities are not combined in one person. This view would be vehemently rejected by most gas managers. Three such managers to whom I repeated this opinion (without, of course, revealing its source) reacted with indignation. Their view, briefly stated, was that highly technical education and qualification must always be insisted upon, and that too many people claiming "general administrative ability" were climbing on to the backs of the real workers in the industry. Those members of the Waverley Association who favoured its merger as a District Association with the I.C.E. would indeed have restricted discussions and activities of the association to "more technical problems that come within the ambit of the Institution Charter."

On the whole the tide seems to be running against the chartered gas engineer who is impatient of "human" studies of the kind recommended by Sir Andrew Clow, and who continues to concentrate exclusively upon technical problems. Organisations like the Scottish Association of Gas Managers (which held its first meeting - a very stormy one - at Ayr Town Hall on 6th September 1951) can serve to correct the balance by discussing those problems of industrial relations which are excluded from the formal education and training of gas managers. Alternatively the fault can be corrected at an earlier stage by/1

1. Sir Andrew Clow, K.C.S.I., C.I.E., M.A., before becoming Chairman of the Scottish Gas Board served with distinction in the Civil Service and as Governor of Assam.
2. Institution Communication, No. 366.
by including "management courses" in the I.G.E. syllabuses. There does seem to be one danger in the merging of the old Waverley Association in the new Scottish body. Formally the association was local and independent. Discussions were friendly and intimate, and completely uninhibited. The association has now been placed on a more formal basis, and in catering for the whole of Scotland will tend to become an impersonal annual conference where speakers are concerned chiefly to impress anyone of importance who is there. Members of the old association represented many different employers; now they all serve the same master, the Scottish Gas Board. The tendency may well be (and in the opinion of some gas managers has become already patent) to express publicly those opinions which are known to be acceptable to influential quarters. In the words of the "Gas World":— "There is in the Gas Council, however, something of Sir Roger de Coverley, of whom Addison wrote that 'he will suffer nobody to sleep in the church besides himself; ... if he sees anybody else nodding, either he wakes them himself, or sends his servant to them.' If the stories that reach us are true, it would appear that expression in public of opinions that conflict with official policy is not lightly to be undertaken—twice. The sturdy independence of the gas engineer, on which the industry was founded, seems to be in no small danger of extinction."

Although these words were used in a general survey, they apply to the particular problems facing the new Scottish Association of Gas Managers. Nobody, indeed, could be more unlike Sir Roger de Coverley than Sir Andrew Clow. But the educative benefits of free and spontaneous discussion may well be reduced now that the Waverley Association has been fitted into a larger and more formal educational framework.

The only "internal" voluntary association of any importance was the Association of Gas Employees, formed at the Edinburgh Undertaking in January 1924, to read papers, hold debates, etc. Membership was open to superintendents, inspectors, meter readers, sales staff and all members of the Gas staff coming into contact with the public.

Surveying the overall national field of education and training in the gas industry there can be no doubt that facilities are now more widely available than in pre-nationalisation days. The decision to entrust Education and Training policies to the Gas Council rather than Area Boards has proved to be a wise one. The Gas Council in its discussions with professional institutions, can speak authoritatively on behalf of the whole industry; its research officers can design schemes based upon a much wider and more detailed study than would be possible at Area Board level by harassed personnel and establishment officers. It is true that Area Boards enjoy considerable powers of discretion in the application of nationally determined schemes, although they are subject to considerable/

considerable "prodding" if it is suspected by the Gas Council that they are guilty of procrastination. Nevertheless, wide variations in the provision of education and training facilities have already emerged as between one area and another in the last four years. Reports and memoranda on these topics must be treated with reserve; there is considerable difference in Scotland, for instance, between what the Board says it is doing and what has in fact been implemented.

Promotion Policy

No new pattern of promotion policy has been introduced into the gas industry since nationalisation. Appointments are made on a similar basis to pre-nationalisation practice, although there has been an extension downwards of the number of posts which are now advertised. Vacancies are filled largely from within the industry, and except for higher posts, from within an Area. The gas industry seems jealous of the rights of management with regard to promotion, and the trade unions have not pressed their claim to participate to the same extent as trade unions in other nationalised industries, although the N.A.L.G.O. requested shortly after nationalisation that promotion should be governed by stipulated professional qualifications. The Board could not agree to this; it was willing to take account of qualifications, but room must be left for the discretion of Board members and of Divisional Controllers in deciding between the merits of different candidates.

With effect from 25th October, 1951, the Scottish Gas Board enforced the following rules in regard to the delegation of powers of appointment and promotion:

(a) Managers are authorised to make all appointments and promotions to vacancies in their authorised establishment within Grades A - D and A.P.T. 1 - 6,1 excluding the appointment of a designated Depute Manager.

(b) Appointments and vacancies within Grades A.P.T. 7 - 12,2 excluding appointments of Managers or designated Depute Managers are to be referred to the Divisional Controller or Group Manager with recommendations for approval. Appointments so made are thereafter to be reported to the Liaison Members3 for information.

(c) Appointments and vacancies at a salary above those in (a) or (b), excluding Managers and designated Depute Managers are to be remitted with powers to the Liaison members.

(d) Appointments of Managers or designated Depute Managers are to be remitted to the Liaison members for consideration and recommendation.

(e) Persons appointed to a particular post should be placed on the first step of the appropriate grade unless the approval to a placing within the scale has been obtained:--

(i) From the Divisional Controller or Group Manager in the case of appointment under (a) above, and

(ii) from the Liaison members in the case of appointments under (b) above.

(f)/ See pages 331-334.
(f) No alteration in the increments specified in the appropriate scale should be made without the approval of the Liaison members.

(g) Alterations in establishment (other than workmen) should be referred to the Liaison members for consideration and recommendation.

These proposals were applicable to all undertakings, regardless of any pre-vesting practice to the contrary.

With regard to the general opportunities for promotion, the larger field covered by an Area Board's activities provides more scope than existed for employees before nationalisation. Promotion is now less dependent on the accident of the undertaking in which an entrant to the industry happened to begin his career. A large municipal undertaking like Edinburgh, however, has always provided good promotion prospects. It is in the small private undertakings that employees have benefited most in this respect.

From the standpoint of the efficiency of the industry, however, promotion policies raise problems of a different kind. How, under nationalisation, can errors of judgement in promoting be rectified? In other words, how can you demote a man whose performance has not matched expectations? Before nationalisation, an employer in the gas industry was able to demote an unsatisfactory employee, or if necessary discharge him, although just before the Second War employees were gaining increased security from the growing strength of their trade unions. Since nationalisation no consideration at all has been given to this matter; movement through the hierarchy - as in the Civil Service - tends to be in one direction only, i.e., upwards. The worst that can happen to a manifestly incompetent man is that he remains stationary.

One contribution to increased efficiency would be the introduction of probationary appointments, but this would be most unpopular with the trade unions. The Scottish Gas Board did at first recruit staff employees on a temporary basis with the possibility of permanent employment, but this was viewed with suspicion by the Scottish Area Joint Council for Gas Staffs. After strong representations from the Staffs' side, the Board agreed to limit this practice as far as possible. The fear of the unions that "blackleg" temporary employees might swamp the industry is understandable. But provided that safeguards over the length of service of temporary employees are introduced no harm would be done by starting all new staff employees upon a temporary basis. In view of the security of employment and the benefits accruing to employees of the nationalised gas industry, it is only fair to the consumers (whose concern is with the efficiency of the industry) that some system of probationary employment should be introduced generally.

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2. The Scottish Gas Board has now agreed to a maximum period of twelve months.
CHAPTER I.

History of the Undertaking

The electricity supply industry was subject to legislative regulation from its earliest days. The Electric Lighting Acts of 1874 and 1888 and the Electric Lighting (Scotland) Act of 1891 empowered the Board of Trade to license or authorized undertakers any local authority, company or private person. It was not until July 1, 1891, that Edinburgh secured an order "setting up an undertaker the Lord Provost, Magistrates and Town Council of the City and Royal Burgh of Edinburgh". It cannot be claimed that Edinburgh was a pioneer in municipal control; Aberdeen, Glasgow, Liverpool, Bradford and Leeds had all proceeded her. This tardiness, however, was not without advantages, as "The Engineer" pointed out to its readers:

"A certain credit is due to those who make themselves the pioneers of a new discovery, but where the interests of a large population are concerned, caution is probably a greater virtue. If Edinburgh has been outstripped by other cities it has the common advantage of having been undertaken at a time when there is little fear of it having to be unusual."

After suggesting that "many would have preferred to see the work in the hands of a private company", the editor went on to assess the advantages of electric lighting to the city: "Lighting helps the police...and adds to the gaiety of citizens."

Some readers might well have replied that these advantages were actually contradictory.

The engineer responsible for bringing electricity to Edinburgh was Professor (later Sir) Alexander B. M. Kennedy, LL.D., F.R.S., who remained as Consulting Engineer with the Corporation until 1923. Kennedy, a native of Edinburgh, became an internationally famous figure and was elected President of the Institute of Civil Engineers, in addition to receiving many other honours. He had established electrical lighting.
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"A certain credit no doubt belongs to those who make themselves the pioneers of a new discovery, but where the interests of a large population are concerned, caution is probably a greater virtue, and if Edinburgh has been outstripped by other cities it has the consolation of knowing that the work has been undertaken at a time when there is little fear of it having to be undone."

After suggesting that "many would have preferred to see the work in the hands of a private company", the editor went on to assess the advantages of electric lighting to the city. "Lighting helps the police...and adds to the gaiety of citizens". Some readers might well have replied that these advantages were mutually contradictory.

The engineer responsible for bringing electricity to Edinburgh was Professor (later Sir) Alexander B. W. Kennedy, LL.D., F.R.S., who remained as Consulting Engineer with the Corporation until 1923. Kennedy, a native of Edinburgh, became an internationally famous figure and was elected President of the Institute of Civil Engineers, in addition to receiving many other honours. He had established electrical lighting/
lighting in many other cities before coming to Edinburgh, but he regarded his work with Edinburgh as of special interest and importance. Emphasis at this time was, of course, upon the use of electricity for lighting, and he informed the Corporation in his preliminary talks that "either the lighting of Princes Street must be something quite exceptional or else it had better be left alone altogether. There is no other street like Princes Street...and it must have the finest piece of street lighting in this country." Kennedy's view was that no other city in the country - including London - offered the same possibility of success as Edinburgh; it was a compact city, with residential, business and shopping districts all close together. This was the best condition for making electric lighting a financial success. Kennedy had no doubts that he could make the project successful from an engineering point of view, but he informed the Corporation that the "supreme necessity is that it should be made a financial success from the municipal point of view."

The 1891 order specified a limited area in which it was made compulsory upon the Corporation to lay down wires in the streets within a given time for the supply of electrical energy to all who might ask for it. This clause expired on 31st July, 1894. Beyond this compulsory area was "an area of supply" which consisted of the whole of Edinburgh within the Parliamentary boundary, and the Corporation were not compelled to lay wires or mains in this area except under certain conditions. Any six owners or occupiers within the area of supply could at any time demand to be supplied with electricity. The Corporation was compelled to comply, provided that those requiring the current would guarantee to take as much of it every year as would amount to 20% of the cost of laying the wires from the nearest point where they were laid to the consumer's premises. This order went to elaborate lengths to protect the consumer. Under Section 23, "whenever the undertakers make default in supplying energy to any owner or occupier of premises to whom they may be and are required to supply energy under this order, they shall be liable to a penalty not exceeding 40/- in respect of every such default for each day upon which any such default occurs."
The Corporation was authorised, at any time after the commencement of the order, subject to the consent of the Board of Trade, to transfer their powers, duties, liabilities and works to any company or person.

Fresh restrictions were placed upon the Corporation under the Edinburgh North Bridge Improvement Act 1894¹ "to widen, alter and improve North Bridge and North Bridge Street." Clause 15 of this Act declared that "the limits within which the Magistrates and Council may construct a station for generating electric power...are the following: certain lands situate within the parish of St. Cuthbert's, Royal Burgh, City and County of Edinburgh and County of Midlothian, bounded as follows on the north by Torphichen Street, on the east by the Caledonian Railway, on the south by Morrison Street, and on the west by Dewar Place."

The Electricity undertaking, in spite of the benefits which it provided, was still obviously regarded with some suspicion by the inhabitants of Edinburgh, both in their capacity as consumers and citizens. The public were highly suspicious of the argument that, because they owned the undertaking, there could be no divergence of interests. Then there were the shopkeepers who wrote indignant letters to the press and petitioned their council representatives to stop pavements being uprooted in front of their shops, thereby discouraging customers.

The "Central Electric Station" (Edinburgh's first Power Station) was erected at Dewar Place at a modest total cost of £115,000. Kennedy was particularly gratified that the site itself had cost only £9,000, whereas Manchester had paid £44,799 for a site in an inferior location. The supply of electricity to Edinburgh began on 11th April, 1895. Between 5 p.m. and 6 p.m. on this day, over a thousand visitors attended the Dewar Place Station. Although invitation cards to inspect the power station had been sent only to the residents in the compulsory area, many inquisitive visitors from other districts attended, and none was turned away. The Lord Provost, who was received with loud applause, opened the station by declaring that "in all countries, whether civilised or not, the great question was Light."²

At midnight electric light was turned on in Edinburgh for the first time. The ceremony/

¹. 57 & 58 Vict. c.151.
². "Scotsman", April 12, 1895.
ceremony took place in the Rutland Hotel, in a room overlooking Princes Street. Dense crowds held up the traffic at the West End, and stretched far down Princes Street and into Lothian Road. The Lady Provost, Mrs. M'Donald, pulled the lever, and Princes Street blazed into light. The words of "The Scotsman" reporter recapture the enthusiasm first aroused by a scene which has long become commonplace to us:

"As if by magic the current flashed along the street; the lamps were lit from end to end almost as quickly as the eye could look along the length of the thoroughfare; the darkness was illuminated, and a ringing cheer, begun in the hotel, was caught up by the crowd and went surging along the street as the invisible current had done a moment before...For an hour or more after the ceremony, the crowd showed little sign of diminution, but instead of concentrating themselves at the West End, they walked along the street and enjoyed the well-lit promenade, on which on the north side of the street, faces could be discerned with the plainness of mid-day."

Demand for electricity grew rapidly and the plant in Dewar Place was extended at frequent intervals. In October, 1899, a new station was opened in McDonald Road. This station was designed for an ultimate plant capacity which it was believed would meet the increasing demand for a very considerable time. The value of this policy was demonstrated by the fact that it was not until the year 1914 that the need for extensions became serious.

Demand for electricity at power rates was increasing. In this transitional period the cinema began to rear its head. There was a long correspondence in 1913 between the Electric Lighting Committee and the Cinematograph Exhibitors' Association (East of Scotland Branch) as to whether moving-picture theatres were using electricity for lighting or power purposes. "The ultimate use of the current," the Exhibitors' secretary informed a somewhat bewildered committee, "is not to supply light for illuminating purposes, but as power required to throw a picture on the screen...The Corporation of Glasgow has recognised the reasonableness of these claims." The Committee/

Committee agreed to charge power rates (instead of lighting) for future supplies of electricity for "projector purposes at picture houses".

In 1914 the Corporation obtained a second order under the Electric Lighting Acts extending their area of supply to include (in addition to the City) the parishes of Cramond, Corstorphine, Colinton, Liberton, and Newton in the County of Midlothian forming the suburban district of the County. In view of increasing demand, Sir Alexander Kennedy recommended that steps should be taken to provide additional plant before the winter of 1914-1915. As existing stations could not take this additional plant it became necessary to look for a site for a new station. In the spring of 1914 a site was acquired at Westbank, Portobello, forming part of the Craigentinny estate, for which £12,245 was paid. The property covered 8.25 acres, and was situated on the sea front, three miles from the centre of the older part of the city and about eight miles from the centre of the Lothian Colliery district. The site was connected with the Lothian Branch of the North British Railway (later the L.N.E.R. and British Railways respectively) and was thus conveniently situated for the delivery of coal from the Lothian coal fields. An additional twenty-four acres of waste land to the west of the site were purchased for use as coal sidings and storage. The position on the sea-front afforded an unlimited supply of water for condensation purposes. Authority was received from the Board of Trade and the Secretary of State for Scotland to erect a new generating station, and plans were drawn up and contracts completed on the basis of finishing the work by the winter of 1916-1917. Work was under way when, on 8th March, 1916, the Minister of Munitions intervened. After two months' correspondence, the Minister intimated that he could not permit contractors to proceed further. Several approaches were made to secure a permit for a portion of the work to continue, but with no success. Then came demands to the Corporation from the North British Rubber Company for electric power, and in October, 1916, there were urgent appeals from shipbuilding firms at Leith who required more electricity supplies. The Leith Corporation undertaking (dating from 1897) was similarly unable to meet all these demands. The Director of Electric Power/
Power Supplies of the Ministry of Munitions came down to investigate. Edinburgh reiterated its demand to go ahead with the Portobello works. The Director promised to raise the matter with the War Cabinet Electrical Services Sub-Committee. This body considered Edinburgh's claim in due course, and came to the decision that (a) no action should be taken on the Portobello scheme until Government policy was announced in respect of the Board of Trade Electric Power Supply Committee's report, and (b) permission was granted for additional plant to be installed at Dewar Place. It was in vain that Edinburgh pointed out that the extensions at Portobello would be exactly in line with the Electric Power Supply Committee recommendations, insofar as they would fulfil all the conditions necessary for a Power Station of the largest size and greatest attainable economy.

Let us consider briefly the national discussions which were taking place on the future of the Electricity Supply industry at the same time as Edinburgh Corporation was occupying itself with local development. In the year 1916 Reports were issued by two Departmental Committees on the subject of future policy. These were the Coal Conservation Sub-Committee appointed by the Ministry of Reconstruction, under the chairmanship of Charles H. Merz, and the Electric Power Supply Committee appointed by the Board of Trade, under the chairmanship of Sir Arthur Williamson (later Lord Forres). Each of these Committees suggested some form of co-ordination. The Coal Conservation Sub-Committee recommended that the country should be divided into separate electricity districts; that sites suitable for electric generating purposes should be chosen on important waterways, as the future main centres of supply for each of the proposed districts, and that sites so chosen should be as large as possible, and should have ample water and transport facilities. The "Williamson Committee" was set up to ensure "that there should be an adequate and economical supply of electric power for all consumers in the United Kingdom". It criticised the existence of too many small authorities which, it suggested, "reflected the infancy of applied science" in the industry, and it described existing legislation as/

as insufficiently comprehensive in outlook. "Concentration of larger generating units in larger and fewer power stations wherever practicable is urgently required in order to reduce the cost of industrial power to a minimum, and to conserve coal and get the fullest value from every ton consumed."  

In January, 1919, the Board of Trade informed the Edinburgh Corporation that it could go ahead with its plans. During the war, the next step would have been for the Ministry of Munitions to sanction extensions, but this was now no longer necessary; the powers of this Ministry under the Defence of the Realm Regulations had been removed, leaving the Corporation completely free to go ahead. The Corporation was, however, in a difficult position. Three alternative courses of action were open: to proceed with the erection of the new station as planned before the war; to erect a new station on a large scale capable of serving a much wider area than the Corporation's area of supply (on the lines indicated by the national reports); or, in view of the greatly enhanced costs of labour and material, to wait until prices had fallen. The Electricity Committee favoured the immediate erection of a new station which would take into account national policies. At a meeting with Board of Trade officials, attended by Sir John Snell, Edinburgh councillors were advised to adopt this course. Kennedy abandoned his pre-war plans and drew up new ones for a power station on a larger scale, which would be capable of supplying the three Lothians. The Board of Trade approved the new plans.

The Corporation accordingly made application to the Electricity Commissioners, under the provisions of Section V of the Electricity (Supply) Act, to determine the district to be supplied by the new Portobello Station and to settle the scheme for the administration of supply within that district. A local inquiry was held in Edinburgh in December, 1922, and the Commissioners decided that the district of supply, to be known as the Edinburgh and Lothians Electricity District, should consist of the City and Royal Burgh of Edinburgh, and the counties of East Lothian and/  

1. Report of the Committee appointed by the Board of Trade to consider the question of Electric Power Supply. Cmd. 9062. 1918.
and Midlothian. The Corporation undertook to provide and maintain the new station at Portobello on their own financial responsibility, but, although they would offer supplies of electricity in bulk for the whole of the district, they would not undertake the distribution of electricity outside their existing area of supply. A settlement was eventually arranged by which the Lothians Electric Power Company became the authorised distributors of electricity throughout the whole district outwith the Corporation's area of supply. Edinburgh Corporation considered that the setting up of a Joint Electricity Authority was unnecessary, and the Commissioners agreed with this view. The extension of the boundaries of the City, in 1920, to include the Burgh of Leith brought the Junction Road (Leith) Generating Station under the Edinburgh undertaking, and provided technical co-ordination over a wider area. During the promotion of the 1920 Act¹ there had been keen controversy over the future administration of the electricity undertakings. Leith had favoured a Joint Trust on the lines of the Gas Commissioners² and the Edinburgh and District Water Trust (set up in 1869).³ These joint trusts had provided important communal services to large centres of population regardless of local government boundaries. The local authorities merely appointed representatives to these trusts, divesting themselves of control over the undertaking, although they remained financially responsible. Sir Andrew Greirson, Town Clerk of Edinburgh, resisted these proposals. "I can assure you from actual experience that the disadvantages of this method (i.e. the joint trust) are many and substantial...If the community of interests of Edinburgh and Leith are so great as to require combined action, why not complete amalgamation for all purposes?" This view prevailed in the final text of the Extensions Bill. The passing of the Local Government (Scotland) Act, 1929, resulted in a grouping together of all cognate administrative functions, and the Public Utilities Committee was set up by the Edinburgh Town Council to include the gas, water, tramway (later transport) and electricity undertakings, although separate sub-committees/

² Edinburgh & Leith Corporations Gas Act, 1885. 51 & 52. Vict. c.129.
³ Edinburgh & District Water Trust Act, 1889. 32 & 33. Vict. c.144.
sub-committees remained responsible for each. Indeed, in conditions of employment, wide variations continued to exist among the manual employees of the various undertakings, although the clerical and administrative staffs were subject to similar conditions.

The first section of Portobello Power Station was opened by H.M. King George V on 11th July, 1923, and plans were made to meet anticipated increases in demand by extensions scheduled for completion in 1929. Meanwhile, discussions were taking place at a national level which were likely to have local repercussions. The Weir Committee had been set up to enquire into the re-organisation of the industry. Its concern was with transmission and generation. Of the 1919 Act it declared: "five years of patient and capable effort have been unavailing...the policy of suasion can only be written down as a failure." The recommendations of this committee, embodied in the Electricity (Supply) Bill, provided for the generation of the national supply of electricity in a limited number of power stations, and the interconnection of these stations by means of supertension transmission lines. Powers were to be given to a new body, the Central Electricity Board, to pick out selected stations at which electricity should be generated. Edinburgh Town Council refused to support a resolution of the Incorporated Municipal Electrical Association in favour of the Bill, and decided to oppose several clauses. The following views were put forward:

(a) No necessity existed for the creation of the Central Electricity Board in addition to the Electricity Commissioners, and that the functions proposed to be conferred on the Board should be conferred on the present Commissioners, which latter body should be enlarged so as to become more representative.

(b) If the C.E.B. was set up, it should (as recommended by the Weir Committee) contain two members experienced in Municipal or Local Government affairs, two experienced in electrical company undertakings, one member with railway experience, one member representative of industry, and one Government nominee (provided that of the members so to be elected, at least one should be representative of Scottish interests).
(c) The C.B.E. (if set up) should be placed under effective Parliamentary control.
(d) Local authority undertakings should be consulted before any scheme was made under Clause 4 of the Bill.
(e) Right of appeal should be given from the Electricity Commissioners to the Railway and Canal Commission.
(f) Schemes made under Clause 4 should be laid before each House of Parliament.
(g) Owners of selected stations should be relieved of the capital cost of extensions made in excess of local needs.
(h) Local authorities should, equally with companies, receive fair value as at the time of purchase.
(i) The period during which the amount charged by the C.B.E. for electricity is not to exceed the cost which the undertakers would have incurred in themselves generating the electricity should be increased from seven to fourteen years.

The Electricity (Supply) Act of 1926 was passed, in spite of strong opposition, with only minor amendments, and Central Scotland was the first area in which the provisions of the Act were applied. It was perhaps ironical that the Edinburgh undertaking, which had viewed the Act with such suspicion should initiate the new Act. For, on 30th April, 1930, the British Grid was officially made alive for the first time from Portobello Power Station by the Right Hon. Herbert Morrison, M.P.

The extensions which preceded this official participation in the British Grid had caused considerable controversy. In 1928 a booklet published by the British Electrical and Allied Manufacturers’ Association, entitled "The Case for National Production", condemned the Portobello Power Station for purchasing foreign plant. It suggested that the Corporation had suffered a capitalised loss of £200,000 as a result of the purchase of Swiss plant. This criticism was taken up by members of the Edinburgh public and raised at a meeting of the Town Council. The City Chamberlain/1.

1. To demonstrate its opposition to the Act, Edinburgh had withheld payment of its legal share of the expenses of the Electricity Commissioners until compelled to pay under the threat of action.
plain (Mr. J. D. Imrie) and the Chief Engineer and Manager (Mr. Edwin Seddon) were called upon to give a report, and they had little difficulty in refuting the alleged loss. The comparison of fuel costs had provided the sole ground for the statement made by the B.E.A.M.A., whereas fuel costs depended not only upon purely generating plant but also upon the price of coal, the cost of unloading coal, the efficiency of boiler plant, and the nature of auxiliary plant. "It is a matter of regret," stated the City Chamberlain's report, "that the Director of Publicity for the organisation which represents the manufacturing interests of such an important industry as the electricity industry should fall into the error of attempting to boost home industry upon the basis of fallacious comparisons. Such a policy cannot redound to the credit of British industry, nor will it contribute to its prosperity." Support for the Edinburgh Undertaking's policy came from a leading electrical trade journal:†

"These figures have been made out in such a fantastic, inaccurate and misleading manner that they are not even worthy of serious comment. One can only express astonishment at the fact that any responsible organisation can have the brazen effrontery to publish anything of the kind."

Controversy was renewed when the Corporation invited tenders for a tramway motor converter for the M'Donald Road station. Five leading British manufacturers sent in the same offers (£4,337) "showing that an agreed price is arranged," as Mr. Seddon pointed out, "before the tenders are made up." These prices were in fact agreed upon by the B.E.A.M.A. ring. A Belgian company, "Ateliers de Constructions Electriques de Charleroi" submitted a much lower price, £2,750, and after heated discussion the Belgian tender was accepted by the Convener's casting vote. Shortly after this, the B.E.A.M.A. expressed regret for the contents of its pamphlet and withdrew it from circulation.

In April, 1936, the Central Electricity Board gave a direction for further extensions to the Portobello Power Station. At the same time, in response to complaints from local residents about fumes and dust, the Corporation decided to proceed.

†. Electrical Times; 1st March, 1928.
proceed with the erection of a high chimney and a new main flue.

Although by this time the Edinburgh Undertaking was participating loyally in the national scheme for generation and transmission it was keeping a keen eye fixed upon Lord McGowan, whose Committee on Electricity Distribution issued its report in 1936.\textsuperscript{1} This committee declared that the range of prices varied too much, and that although the time was not yet ripe for a national scale, re-organisation should be based on retention and utilisation of larger and more efficient units. The Government should prevent the splitting up of comprehensive undertakings in consequence of the exercise of rights of local authorities. It also declared that "the voluntary basis is bound to fail...legislation must confer definite and adequate compulsory powers."

Edinburgh favoured the view that there should be no interference with the existing purchase rights of local authorities, and that the determining factors to be taken into account in any scheme or re-organisation should not be the size of the undertaking alone, but whether the amalgamated organisation will be in a better position to afford a cheap and abundant supply of energy both to domestic and power consumers. District schemes should be provisional, and should not become operative until confirmed by Parliament. The terms of purchase should be the same whether the seller was a company or a Local Authority undertaking displaced, and if the position was worsened as a result of any legislation passed in pursuance of the Committee's report, equitable compensation should be provided.

In May, 1937, the Ministry of Transport White Paper\textsuperscript{2} (based upon the McGowan Committee report) proposed the division of the country into groups, and it made it clear that Edinburgh would be left as one unit.

the recommendations of a joint meeting of the Lord Provost's Committee and the Public Utilities Committee. They decided to make representations regarding the proposed Bill to the effect that:-

(1) The Bill was unnecessary and contrary to the public interest.

(2) Its provisions would add to the cost of electricity generally, and particularly to the Edinburgh consumer.

(3) It would not result in an efficient service to the consumer.

(4) If the Bill were proceeded with, the provisions for the formation of Area Boards for South East and South West Scotland responsible to the Minister instead of the Secretary of State for Scotland should be deleted; one Central Authority for Scotland should be set up, responsible to the Secretary of State.

(5) That areas which at present have a tariff lower than that to be charged when the new statutory provisions become operative should have existing tariffs preserved for a period of 10 years.

(6) That reserve funds should be transferred to Area Boards or authority in whom is vested the assets and management of the undertaking in respect of which the reserve fund was created and should be used for the exclusive benefit of consumers within that area.

Neither these nor other recommendations were in fact accepted by the Government, and the electricity supply industry was nationalised on April 1st, 1948. On that day, the British Electricity Authority (the Central Authority) and fourteen area electricity boards took over the ownership and operation of the industry throughout most of Great Britain. ¹ The B.E.A. is a statutory corporation. The Act provided for a Chairman² and from four to six other members to be appointed by the Minister of/  

¹. The North of Scotland District was excluded from the area of operations. Also excluded were some small non-statutory electricity supplies amounting to a fraction of one per cent. of the total supplies to the public.  
². The Minister appointed the Rt. Hon. Lord Citrine, P.C., K.B.E., Comp.I.E.E., a former electrician in the industry; Mersey District Secretary, Electric Trades Union, 1914-1920; Assistant Secretary, E.T.U., 1920-1923; Assistant Secretary, T.U.C., 1924-1925; General Secretary, T.U.C., 1925-1946; Member of the National Coal Board, 1946-1947.
of Fuel and Power from among persons who have had experience of, and shown capacity in, the generation and supply of electricity, industrial, commercial or financial matters, applied science, administration or the organisation of workers. They serve for a period not exceeding five years and are eligible for re-appointment. Four other members are appointed by the Minister from among the Area Board Chairmen for a period not exceeding three years, the appointments being made from the Boards in rotation. The remaining member is the Chairman for the time being of the North of Scotland Hydro-Electric Board, and one or more Deputy Chairmen are appointed from among the members by the Minister.

The B.E.A. exercises a general control of policy and are responsible for the generation of electricity and its supply to the Area Boards for the purposes of distribution. They have taken over the generating stations and associated main transmission lines which belonged to the former electricity undertakers and power station companies, together with the national network of main transmission lines (known as the Grid) which was owned and operated by the Central Electricity Board.

In planning their administrative arrangements, the Central Authority had to decide what measure of decentralisation was desirable. For the operation and control of the Grid system, the country had been divided into seven areas. The nationalisation Act, however, had provided for fourteen distribution Areas, each with its Area Board, and there appeared to be considerable advantages in having operational units for generation and main transmission which corresponded territorially to the Area Boards.

The B.E.A. therefore established fourteen Generation Divisions, each under a Divisional Controller to whom was entrusted the management of the generating stations and the section of the Grid in his Division. This arrangement was intended to provide areas of good size for technical purposes and not too large for effective management. In addition, seven of the Divisional Controllers became administratively responsible for the seven control centres of the national transmission system located in their Divisions. Thus each Divisional Unit became an integrated regional organisation, operating a highly complex system of power generation and main/
main transmission over a wide area. The Controller has considerable autonomy in matters of construction, maintenance and operation, and full responsibility for his staff and administration. General operational and development policy and planning are determined by B.E.A. Headquarters, but at regular conferences of the Divisional Controllers and the full-time members and chief officers, and by other contacts and communications, the Controllers are closely associated with the formulation of policy and plans in the execution of which they necessarily play so large a part. Where it is desirable to establish a common practice throughout the Divisions, headquarters issue instructions accordingly, after consultation with the Controllers. The departmental officers at B.E.A. Headquarters maintain functional contact with the corresponding officers in the Divisions, but without detracting from the general responsibility of the Controllers for the work of the Divisions. In Scotland (apart from the North of Scotland Hydro-Electric Board which exercises statutory responsibilities1 for generation, transmission and distribution in its area) two generating divisions were set up to coincide with the Area Boards. These were the South West and South East Scotland Divisions. It was under the control of the latter division that Portobello Power Station passed, on April 1st, 1948. The Edinburgh City Electrical Engineer became the first Divisional Controller.2

Whereas the divisions are merely administrative units, set up to suit the convenience of the B.E.A., the Area Boards are statutory corporations. Fourteen Area Boards were established under the Act, and they have taken over former local electricity undertakings, with the exception of the generating stations and main transmission lines. They distribute electricity to the consumers, and for this purpose/

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1. Under the Hydro-Electric Development (Scotland) Act, 1943, as amended by the Electricity Act, 1947.
purpose buy from the Authority bulk supplies of electricity which are delivered to
the distribution systems of the Board either directly from the generating stations
or from other points on the Grid. The Chairman and from five to seven other members
of each Board are appointed by the Minister, after consultation with the Central
Authority,¹ and they serve for a period not exceeding five years, with the possibil-
ity of re-appointment. The remaining member is the Chairman for the time being
of the Consultative Council established for the Area by the Minister. A Deputy
Chairman is appointed from among the members by the Minister.

Subject to the Authority’s general control of policy and other powers² the
Area Boards are autonomous in management and operation. When, however, the organi-
Sation of the Area Boards was under discussion in the months preceding vesting day,
it was agreed that a general pattern for the main structure was desirable; although
it was recognised that with Areas of widely different geographical and technical
natures complete uniformity would be undesirable. The proposals outlined for
consideration by the individual boards, therefore, aimed at a basic similarity of
organisation, whilst ensuring flexibility and leaving freedom to meet local condit-
ions and to preserve Area efficiency and initiative. As a result, a broad
uniformity of general structure was agreed by the Area Boards, leaving the detail
for adjustment to local circumstances. Area Board headquarters are responsible for
the over-all administration of the Area, and are divided into four main departments—
those/

1. The Minister appointed as Chairman of the South East Scotland Electricity Board
Sir Norman Duke, K.B.E., C.B., D.S.O., M.C., B.A.; born Brechin, Angus; educated
Merchiston Castle School, Edinburgh; Corpus Christi College, Oxford; Civil

2. The Central Authority is required by the Act to co-ordinate the distribution of
electricity by the Area Boards and to exercise general control over the policy of
the Boards. For these and other purposes, the Authority is empowered to give
such directions to the Area Boards as appear to the Authority to be necessary or
expedient. Thus, while the function of distribution is separated from that of
generation and main transmission, and is under separate statutory corporations,
provision is made for the co-ordination of the whole industry on a national
basis.
those of the Secretary, the Chief Engineer, the Chief Commercial Officer, and the Chief Accountant. In general, the allocation of duties corresponds to that at Central Authority headquarters.

Each Area has been divided for operational purposes into Sub-Areas, normally five or six in number. Each Sub-Area organisation is under a Manager, and the officers on his staff usually include an Engineer, a Commercial Officer, and an Accountant and a Secretary. These officers, while under his general control for purposes of internal administration, are in varying degree answerable for their specialist functions to the chief officers at Area headquarters.

In its discussions upon the organisation of the industry, the Authority laid down the considerations which each Area Board should take into account in determining the number of Sub-Areas to be established. The Sub-Area had to be sufficiently large in area, in number of consumers or in electrical load, or in combination of all three, to admit of economical administration. It had to be sufficiently small to ensure that the staff had an effective personal knowledge of the relevant technical, financial and human problems, and for the Manager and his officers to be in touch with all grades of staff. Where possible, the Sub-Area should comprise territory in which there was a general community of interest and a natural focal point such as a considerable town.

Thus, at the same time as Portobello Power Station passed under control of the South East Scotland Division of the B.E.A., the Edinburgh stations concerned with distribution (including the Dewar Place station) were transferred to the South East Scotland Area Board. This Board created five Sub-Areas: Edinburgh, Lothians, Southern, Fife and Central. A Sub-Area Manager was duly appointed for Edinburgh,1 and he is directly responsible to the Deputy Chairman of the Board. In the case of Edinburgh, this direct responsibility is particularly useful; the Board headquarters are/

1. Mr. G. T. Allocoo, B.Sc., A.M.Inst.C.E., A.M.I.E.E.; educated Loughborough College; trained Brush Electrical Engineering Company Ltd.; Draughtsman, Metropolitan-Vickers, 1923; Maintenance Engineer, Dundee Corporation, 1925; Deputy Engineer and Manager, St. Helens, 1938; Electrical Engineer and Manager, Great Yarmouth, 1944-1948.
are barely half a mile away from the Sub-Area Manager's headquarters at Dewar Place.

As far as the employees of the Edinburgh Undertaking were concerned, the transition was fairly swift and painless; in most cases they continued doing the same work. The only difference was that some were now employed by the new Division, and some by the new Area Board. There was, however, a small group of workers who remained with the Corporation, although they passed under the aegis of another Committee.

There were employees engaged on the maintenance of electric motor installations in the various departments, traffic signals and installation of electric stair lights, and they were transferred to the Lighting and Cleansing Department of the Edinburgh Corporation. This transfer, however, involved only twenty-two men.

It is perhaps not fully realised outside the electricity supply industry that schemes for national integration have involved somewhat arbitrary separation of functions at a local level, particularly for those local authorities like Edinburgh which had built up a smoothly functioning self-contained unit. The separation of distribution from generation, for instance, has created considerable inconvenience. Although the separation into two entirely separate authorities (board and division) was perhaps an inevitable development of the 1926 Act, Edinburgh formerly managed to get the best of both worlds. The Portobello Power Station, as a selected station, served a wider area than Edinburgh for the purposes of generation, but it remained under the administrative control of Edinburgh Corporation for both generation and distribution purposes. According to one senior engineer at the Dewar Place Station (now controlled by the Board), the difficulty was not too formidable in spite of the separation. This, however, was only because he had worked for the municipality for many years prior to nationalisation and was on familiar terms with the senior personnel of the municipality who had passed over to the Division (i.e. Portobello Station) after nationalisation. Thus, although theoretically they now dwell in different, autonomous administrative kingdoms, these engineers can contact each other by telephone on "an old boy basis", and correct technical maladjustments between/
between generation and distribution. But this is done by circumventing the proper channels of communication between Board and Division, and, as this engineer pointed out, will probably come to an end when the older personnel retire. The views of this engineer were that, whatever the national advantages, the separation of distribution from generation was a grave disadvantage for the Edinburgh area, and the arrangement was only working well because of these accidental personal relationships which had survived from the days of the municipal undertaking.

Whatever the merits or demerits of the change, the fact remains that nationalisation has created three separate managements for the Edinburgh electricity industry, where previously only one existed; the South East Scotland Division, the South East Scotland Electricity Board, and Edinburgh Corporation (although this last named is of very minor importance, as indicated above).

Under this member comes the Secretary of the Board, and, through him, the Director of Establishments who controls the following branches:

(i) Personnel
(ii) General Services
(iii) Superannuation

The Director has a general responsibility for the main power stations.

2. Board member for Labour Relations and Welfare, assisted by:

(i) The Chief Labour Relations Officer, who controls three officers each responsible for a section of the negotiating machinery, as under:

(a) Manual grade
(b) Clerical and administrative grade
(c) Technical grade

(ii) The Director of Training, Safety, and Welfare, who is assisted by officers responsible for:

1. The present Deputy Chairman (administration) is Sir Henry Sell, K.C.B., K.C.M.G., K.B.E., Comp.I.R.E., formerly employed in the Civil Service, Transport Board: General President, Electrical Trades Union, 1931; General Secretary, E.T.U., 1941-1947.
Note on Personnel Organisation in the Electricity Supply Industry since Nationalisation.

B.E.A. Headquarters

The full-time members of the B.E.A. are the Chairman, the two Deputy Chairmen (one of whom is in charge of administration, the other of operation), and the member responsible for labour relations and welfare.

The Deputy Chairman responsible for administration is concerned with personnel matters insofar as he controls establishment policy. The member for labour relations and welfare controls two departments (which in the coal industry, it will be remembered, are under separate board members at national level). He is also responsible for education and training and for the authority's participation in the Electricity Supply Industry.

1. Deputy Chairman (Administrative).

Under this member comes the Secretary of the Board, and, through him, the Director of Establishments who controls the following branches:

(i) Personnel
(ii) General Services
(iii) Superannuation

The Director has a general responsibility for the manpower position.

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2. Mr. E.W. Bussey, C.B.E., formerly a charge engineer in the London Passenger Transport Board; General President, Electrical Trades Union, 1931; General Secretary, E.T.U., 1941 - 1947.
(iii) The Chief Medical Officer

Whereas the Labour Relations staff are concerned with the advisory machinery and the negotiation of wages and salaries, the Director of Establishments is responsible for the implementing of agreements.

Divisional Level.

The Divisional Controller is usually assisted by a specialist personnel officer and by a Divisional Education and Training Officer. Formerly this latter officer was responsible for both the Division and the Area Board, but the practice is now to appoint a separate official for each. Although this is administratively more convenient it is doubtful whether the duplication is justified.

There was a need for liaison, however, between generation and distribution authorities, upon conciliation and other matters, and the B.E.A. has appointed District Labour Relations Officers to carry out this co-operation.

Area Boards.

Each Area Board consists of a Chairman and Deputy Chairman who are full-time, and from five to seven part-time members, one of whom is Chairman of the Area Consultative Council. Although the Chairman is expected to give special attention to administrative matters and the deputy to technical matters (or vice versa) functional responsibility cannot be said to exist at Board level. Thus, there is no special representative at this level for labour matters.

Staff matters and relations usually fall within the province of the following officers (although the practice varies from Board to Board):—

Establishments Officer (responsible to the Secretary) assisted by:

(i) Personnel Officer (responsible for negotiations as well as personnel problems)
(ii) Welfare Officer
(iii) Education and Training Officer

In the South East Scotland Area Board the Personnel Officer (Mr. D. R. Shepherd) is also responsible for Welfare and Education and Training.

Sub-Area, District and Undertaking Levels.

There/
There is no formal machinery at these levels. Joint consultative machinery is usually the concern of a fairly junior officer upon the administrative staff.

To understand the nature of the duties performed by the many different categories of workers we must know something of the basic operations in the industry. Electrical power engineers, when asked to explain the nature of their work, make casual reference to technical matters which they assume are self-explanatory. Hence the following simplified description of how coal, usually vastly inferior in physical qualities to that demanded by other consumers, has its energy translated into electric current.

Coal is burnt in a furnace and the heat is transferred to water. This water will evaporate at a temperature corresponding to the pressure maintained in the boiler. The steam is passed to the turbine where it is allowed to expand through nozzles, velocity energy being gained at the expense of its heat content. If the expansion takes place in fixed nozzles, and the blades on the turbine wheels simply deflect the high-speed jets of steam, they will experience a forward thrust. This is the principle of the impulse turbine. If, however, further expansion and therefore further increase in velocity takes place whilst the steam is passing through the moving blades an additional thrust is experienced on these latter in the same way as a rocket is urged upwards by the stream of gases accelerating from within the body. A so-called "reaction turbine" functions in this manner. To allow the fullest expansion and thus exploit the heat content of the steam to the utmost a vacuum is created at the turbine exhaust by causing the leaving steam to come into contact with and condense upon a large number of tubes through which cold water is circulated. It should be dawning upon the layman by now why Portobello was selected as a site for a Power Station. The position of the nearby Lothian coalfields and the Firth of Forth fulfill the twin needs of generating stations.

One further basic operation should be understood. Faraday found in 1831 that if a bar magnet was moved relative to a coil of wire a voltage was produced across
CHAPTER II.

Environmental Working Conditions

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One further basic operation should be understood. Faraday found in 1831 that if a bar magnet was moved relative to a coil of wire a voltage was produced across the/
the ends of the latter. Using the mechanical power delivered to the turbine shaft to rotate a magnet inside a coil of wire it is found that an alternating voltage is developed directly proportional to the speed of rotation, the number of turns in the coil, and the strength of the magnet.

It may be asked why so many years elapsed before Faraday's discovery and the building of electric stations. The answer is that the earliest arc lamp was so unpleasant and odorous that nobody wanted it in their homes. It was not until Edison invented the filament lamp that the demand was created which in turn provided incentive for the building of central stations for public electricity supply. Thus, when Councillor Mackenzie of Edinburgh Town Council spoke at the Dewar Place ceremony in 1885, he was able to remind his hearers "how gas blackened the roof, soiled walls and damaged pictures...there are no fumes to do damage from an incandescent electric lamp." It is hardly necessary to add that the Gas Commissioners immediately launched a counter-offensive in the columns of "The Scotsman".

The Dewar Place and McDonald Road stations generated direct current for distribution without transformation, but this was expensive to transmit over long distances. Kennedy must have known at the time that Ferranti had introduced alternating current (which could be transmitted much more economically) at Deptford in 1889. But Kennedy was right in assuming that D.C. economised labour and other costs where only a small area was involved. It was the practice at Dewar Place to run the D.C. plant only when there was a sufficient load to run the plant at high efficiency. At other times electricity could be obtained from a storage battery. On an A.C. system storage would not have been possible, and plant at the power station would have to be run continuously day and night involving running sometimes on an unremunerative light load. By 1913 it had become clear to Kennedy that the limits of direct distribution had been reached, and that what was required was a new generating station to produce high-tension three-phase alternating current which could be distributed/1.

distributed to sub-stations in the area. The situation of these sub-stations should permit the conversion of the alternating current to direct current for the supply of electricity for lighting, power or traction. Subsequent legislation, as we have seen, encouraged these technical developments, and a new station at Portobello was constructed.

Although conditions in generating stations have been generally good (in comparison with other industries) since the start, a few improvements have occurred. Originally, for instance, coal was shovelled on to fixed grates contained within horizontal cylindrical boilers, the draught for combustion being induced by tall chimneys. When Portobello Power Station was constructed, however, elaborate arrangements were made to reduce the manual handling of coal. The coal handling plant was adjusted in consultation with the railway company. The sidings were situated on land adjacent to the station. Trucks were emptied by a rotary tippler which turned over each truck and emptied it into a hopper below ground level. From this hopper the coal fell by gravity on to a rubber belt conveyor capable of carrying 100 tons per hour running in a tunnel, which connected the sidings to the boiler-house site. This belt discharged the coal on to another belt conveyor, which in turn discharged it into hoppers feeding gravity bucket conveyors which carried the coal up into the bunkers provided over each boiler-house. From the bunkers the coal fell by gravity down steel chutes into the hoppers of the boiler stokers. The greater part of the coal handling plant was electrically driven. For marshalling the trucks and bringing them on to the truck tippler, electric capstans were provided. Weigh-bridges were installed to weigh the trucks before and after they were emptied.

Ashes were discharged from hoppers below the boilers into skips. These skips were run by hand to the north side of the boiler-house, where, after being sluiced, they were lifted by a hoist and tipped into a reinforced concrete ash bunker, from which they were later removed by motor transport. In spite of these mechanical devices, the disposal of ash was an unpleasant task, because of the dust. New ash extraction plant, however, constructed in 1939, eliminated much of the dust associated/
associated with this procedure. Since the war, the percentage of ash in coal supplied to generating stations has increased, and the disposal of ashes has become an increasingly important task.

In the early days, generators in the engine room were still unenclosed and were low in speed and large in diameter. The switchboard was manually operated, all contacts being exposed.

Modern turbo-generators, boilers and electrical plant are generously provided with recorders and other instruments whose indications are regularly logged. These records show whether maximum efficiency is being reached. In the early days it is doubtful whether much more than 10% of the heat energy in the coal was utilised; the remaining 90% - so laboriously shovelled in - was wasted. In the Portobello station, however, meters were introduced for measuring the quantity of steam generated by each boiler, the amount of feed water entering each boiler, with thermometers for showing its temperature before and after passing through an "economiser", instruments for measuring the quantity of coal used, steam pressure and temperature indicators and instruments for showing the draught.

The turbine-room and the boiler-house at Portobello are at right-angles to each other, divided by a pipe annexe. In addition to pipes, feed pumps, and tanks, it contains mess rooms, lavatories and locker rooms.

The condensing water system was designed to make use of sea water. As the foreshore at Portobello shelved very gradually it was necessary, in order to secure an ample supply of water at low tide, to place intake water shafts about 500 yards from high-water mark. Three sets of shafts and tunnels were constructed, each being used for drawing water from the sea or returning it. In 1930 a fourth tunnel was added. The capacity of the installations was increased by using the first three tubes as intakes, whilst the new tunnel returned all the water to the sea. At the station pump-house, land shafts linked up with the sea tunnels. One problem connected with the condensing water system is the popularity of the water pipes with mussels/
mussels, which multiply rapidly and cling to the inside of the pipes. At regular
intervals, the condensing water temperature is allowed to rise and the mussels are
washed away.

The various sub-stations of the undertaking contained motor or rotary convert-
ors, or were static transformer sub-stations. In the case of static types no
attendants are required, the transformer being locked up or, in some instances,
installed in pits in the street or in pillars known as kiosks. For the Cowgate,
Morningside and Gorgie Sub-stations, entirely new buildings were erected. Dewar
Place and McDonald Road became sub-stations after the opening of Portobello.

Outside the power station we encounter working conditions of quite a different
nature, and involving a variety of tasks. The laying of cables, for instance,
involving some knowledge of surveying and plumbing at different stages. Low tension
work (chiefly for electric lighting purposes) is not quite so arduous; but high
tension cable joints (used for power purposes) must be as nearly perfect as is
upon humanly possible, and the work of the cable jointers depends the efficiency of the
whole undertaking. The duties of the unskilled workers in the mains department are
chiefly those of excavation, and the work remains very nearly as dirty and arduous
as it has always been, exposed to all weather conditions. Outdoor conditions also
concern linesmen (responsible for overhead lines), on whom must also fall the
rigours involved in working in a dangerous position at considerable heights. Insul-
ators in industrial areas collect all the soot and deposits from factories, and it
is the duty of linesmen to clean these dirty insulators.

But excluding the distribution side, working conditions in the power station
can be said to be very good. As we have seen, coal, ash and flue dust are moved
mechanically and there is no longer any need to heave and shovel coal. It is, after
all, appropriate that the benefits of electrically operated machines should have
been used from the earliest days to reduce manual labour in power stations. The
worker has become increasingly a supervisor instead of taking part in actual
production; theoretically it should be possible to run a station for a short period
without/
without anyone being there, although this is hardly likely to happen. It is true, however, that the Edinburgh undertaking during two world wars managed surprisingly well to withstand heavy withdrawals of members of staff. Supervision and adjustment of controls remain the main duties of workers, although there are of course the requirements of maintenance and repair work. It is necessary to ascertain the rate at which parts wear out, what adjustments and cleaning are needed, and instead of waiting for signs of trouble to appear, there must be regular overhauls of the plant while it is still in running order. Maintenance and repair work seems to overlap with the actual running of the plant, both temporarily and insofar as some workers are responsible for both categories of duties. This lends variety to the work and relieves the tedium of what might otherwise be a dull, repetitive process.

In the boiler-house, such factors as the corrosion and fouling of heating surfaces require continuous attention. Recent improvements in the type of firing, fuel utilisation and boiler design have reduced corrosion. Certain large boilers, which originally required cleaning after about 700 hours steaming, now operate continuously for periods of 5,000 to 6,000 hours.

Developments in generating plant have rarely been actuated by the dire need for economising the use of labour. How small a percentage of total costs is attributable to labour can be seen in the 1957-1958 generating costs of the Portobello Station. Out of a total £460,000 only £21,786 (4.72%) was expended on salaries and wages. The largest individual item, £221,782 (48.14%) was expenditure on coal, while interest and sinking fund charges took a further £126,586 (27.4%).

The/

1. According to Mr. John Dent, A.M.I.E.E., of the South East Scotland Electricity Board, the highly mechanised nature of the industry has been an important factor in averting strikes. Manual workers know that if they withdraw their labour the technical staffs — aided perhaps by clerical workers brought in to do the unskilled work — can carry on for quite long periods without them. The fact that technical staffs in the electricity industry occupy a position of more strategic importance than their colleagues in other industries is usually stressed by the Electrical Power Engineers' Association in advancing wage claims.
The three main motives behind developments in generating plant have been economy in capital costs, simplicity of construction, and potential improvement in all-round performance. But a considerable improvement in the environmental working conditions of the workers has occurred incidentally in the pursuit of all-round efficiency, and this improvement in turn has reacted favourably upon the industry by creating a high degree of morale and security which themselves contribute to efficiency in its widest sense.
CHAPTER III.

Wages, Earnings and Hours of Work, Holidays

Manual Workers

In dealing with the complex hierarchy of manual workers in the Electricity supply Industry it would be confusing to attempt any rigid sub-divisions. Operational, maintenance, and repair duties frequently overlap, and it must be remembered that some occupations are common to the distribution and generation side. This section will, therefore, embrace unskilled, semi-skilled and skilled manual workers. In these categories are included labourers and the mates of skilled workers, armature winders, ash plant attendants, auxiliary plant attendants, battery attendants, blacksmiths, boiler cleaners, coal weighers, conveyor attendants, drivers of cranes, jetty cranes, excavators, locomotives and steam turbines, (not to be confused with transport drivers), electricians, fitters (electrical and mechanical), installation inspectors, jointers, linesmen, meter employees (fixers, readers and collectors, repairers and testers), public lighting attendants, riggers, shunters, stokers, storekeepers, sub-station attendants, switchboard attendants, trimmers, turners and welders.

Hours of work in the early days of the Edinburgh Undertaking ranged from 56 hours weekly for shift-workers to 51 hours for day labourers and most classes of tradesmen. Fitters worked 53 hours. Men engaged in recognised trades received the standard rate for the district, but many intermediate occupations (men engaged on work slightly more responsible or arduous than ordinary labourers) were paid rates fixed at the discretion of the management. Labourers were paid "rates generally recognised as fair in the district" and it was this rate which was taken as the basis for computing rates for semi-skilled workers whose occupation was peculiar to the Electricity Supply Industry. The Electric Lighting Committee insisted that contractors working on its behalf should pay recognised rates. It gave sympathetic consideration, for instance, to two petitions in 1911 from the Edinburgh branch of the Scottish Painters' Society and the Edinburgh Trades Council. These petitions, made/
made on behalf of painters and labourers respectively, alleged that Messrs. G. & R. Cousin, sub-contractors to the Motherwell Bridge Company, were not paying the standard rates to men employed upon the painting of two cooling towers at Dewar Place, although they had given an undertaking to do so. The Town Clerk was instructed to write to the contractors requiring them to fulfil their obligation. Mr. Cousin, however, had other views on the matter. He had no objection to the payment of the standard rate (8½d per hour) to painters, but he was scornful of the claim of labourers for an extra halfpenny an hour. (The petition had stated that 5½d was the standard rate, and only two contractors in Edinburgh paid less than this). Mr. Cousin replied: "When we took the sub-contract with you, the rate of wages paid by us to labourers was the same as we had paid for years, viz. 5d per hour, and we had never heard, nor have we heard yet, of a standard rate of 5½d per hour". He went on to say that he did not desire to attend any meeting of the Electric Lighting Committee to discuss the matter. The Committee thereupon passed a resolution stating that the Fair Wages Clause in the contract had been infringed, and a further resolution of the 12th December, 1911, instructed Mr. Cousin to pay his labourers the increased rate of 5½d, including back pay. Mr. Cousin appeared before the Committee in January, 1912, and handed over a cheque for £5 for retrospective payment. He exacted a promise from the Committee, however, that if any labourers who had left his employment since the start of the contract could not be traced, the money would be returned to him. In view of the very small amount involved, Mr. Cousin's business tenacity must be admired. His troubles, however, were not over. His employees alleged that 6d had been deducted from their pay as a contribution to the Glasgow Royal Infirmary, and the Committee insisted that this money should be repaid to the men.

In July, 1913, the Committee met to establish a more orderly system of wage rates. Already in that year they had awarded the Arc Light Trimmers (after two petitions) a weekly wage of 27/- rising by annual increments to 30/-, while in response to a petition from the caulkers (labourers employed on special work on the mains/
mains) they fixed a scale for these workers rising from 24/- to 26/- in two annual increments. These awards led to applications from other workers. The Committee resolved that, in view of special benefits introduced by the Corporation, rates for skilled tradesmen should henceforth ½d less than trade union rates, but that wages of labourers should continue to be fixed at the standard rate (6d an hour in 1913). Rates for partly skilled workers (e.g. caulkers and pipelayers) should henceforth be fixed at ½d an hour above labourers. A ceiling of 31/- weekly for this category was later introduced by decision of the Edinburgh Town Council, and special authorisation was required before the Electric Lighting Committee could advance wages beyond this point.

The special benefits referred to in the Committee resolution were holidays with pay, superannuation (see page 562) and an "upstanding wage" (no "broken time"). Four consecutive days holiday and four public holidays were granted to employees with over one year's service, and in January, 1913, this was amended to permit men not doing Sunday or night work to take one week's holiday during summer, with two public holidays (making a total of eight); men doing Sunday or night work were allowed ten consecutive days; switchboard attendants, mains inspectors and "men of similar rank" (this definition was subject to the management's interpretation) were allowed 14 - 16 days. These concessions were made only on the understanding that men worked overtime at ordinary rates (the trade union rate for most trades was time-and-a-half for night work and double-time for Sundays and holidays). Overtime was worked as little as possible, however, at the Edinburgh undertaking. Men belonging to trade unions were given the chance to "contract out" of these benefits for full trade union rates of pay and overtime. In May, 1914, the Council amended the holidays to six consecutive days and four public holidays, and the arc light trimmers were granted seven consecutive days and four days in lieu of public holidays. After six months' service an employee was eligible for half the holiday period. These concessions made in May were in response to a petition from the N.U.C.W.
The outbreak of war led to departures from the agreed pay schedules, particularly with regard to engineering tradesmen. The great demand for fitters and turners led to a rise beyond the trade union rate. Although this remained officially at 8½d an hour (this rate—i.e., 36/5d per week—was paid by the management) private firms in Edinburgh and elsewhere were offering from 10d—1½d for fitters. The War Office was offering 55/- per week to fitters for the motor transport service in France. The Resident Electrical Engineer suggested that fitters should be offered 9d (39/9d per week) and that, in view of the fact that the trade union rate would be shortly increasing, he should be authorised in future to pay "such rates for skilled men as he considered necessary". This unorthodox suggestion was accepted, and embodied in a Committee resolution. In March, 1915, boilermakers and blacksmiths were given an extra 3d an hour.

In 1915 there was an application from temporary labourers employed on mains-laying for an extra 3d an hour (making 7½d). This was granted, and the permanent labourers were offered the same increase, but only as an alternative to Corporation benefits. This led to considerable dissatisfaction among those permanent workers who were thus working side by side, at a lower rate of pay, with temporary workers.

In July, 1916, meter repairers' wages were increased from 32/6d to 34/-, and in September the Committee granted a request from the N.U.C.W. that, in view of the award to labourers, attendants employed on the sewer pumps should be given an increase of 3d (to 8d). Switchboard attendants were given an increase from 35/- to 37/6d; turbine drivers, 35/- to 36/-; firemen, 35/- to 36/-; and assistant firemen and battery attendants, 7½d to 8d.

By October, 1916, the fitters' trade union rate had risen to 10½d but it was drawn to the attention of the Committee that a resolution of the Town Council required tradesmen to choose between the standard rate and sick pay and holidays. The Resident Electrical Engineer insisted, however, that he had personally promised both trade union rates and benefits to the fitters at the beginning of the war, in an effort to persuade them to remain with the Undertaking. A written agreement to this effect had, in fact, been drawn up in February, 1915. The fitters were thus allowed/
Various war bonuses were awarded to all workers during the course of the war, and by November, 1918, labourers were receiving a bonus of 18\text{\textstg} for 53 hours, while fitters and other engineering tradesmen were receiving 20\text{\textstg}. In addition to these war advances, awards of 12\% had been granted. On 27th November, 1917, the Ministry of Munitions granted 12\% increases to fitters and moulders. On 7th January, 1918, Sir George Askwith handed down the following decision in connection with the wages of employees at electricity generating stations:

"I decide that all plain time working employees in Generating Stations, Substations, and on mains directly concerned in the generation and distribution of electrical energy, including technical staff, shall receive a bonus as follows: All workers who have received not more than 20\text{\textstg} war advance shall receive the equivalent of 12\% on earnings. This decision shall take effect as from the beginning of the first full pay day next after 13th October, 1917."

Employees were paid for overtime at only the basic rate (exclusive of bonuses). This meant that labourers, for instance, earned 11\text{\textstg} an hour for a full week of 53 hours, but if they worked overtime on Saturday or Sunday they received only 8d an hour. In the case of fitters and other skilled tradesmen, however, the Committee on Production ruled that the bonus of 20\text{\textstg} per week, plus the 12\% award, should be taken into account in calculating overtime rates. This meant that these workers received the same rate for overtime as for ordinary time. The consequence was that labourers refused to work overtime, and the management was compelled (if it required a fitter and mate, for instance) to pay overtime rates to two fitters. The Committee therefore decided, in June, 1918, to pay labourers their full ordinary rates for overtime.

The bargaining position of fitters remained very strong. The shortage of fitters led to long hours of overtime, and they requested higher pay for this work. The Committee offered the ordinary rate with benefits for up to 63 hours a week; time-and-a-half for 63 to 73 hours a week; and double time for 73 hours a week and over.
This was accepted by the fitters, and statements were signed to this effect between the men and management.

In December, 1918, the Edinburgh branch of the N.U.C.W. requested an increase in pay to bring the advance above pre-war up to 28/6d plus the 12½; women should be paid the same rate as men when doing men's work. The Committee decided to await the issue of an award in arbitration between the National Gas Council and National F.G.W. which might affect comparable workers in the electricity supply industry. This award was made in 1919, and as a result, the Electric Lighting Committee in March, 1919, agreed to increase the wages of male employees over 18 by 5/- (provided that the total general or war advance did not exceed 28/6d). This clause did not include male employees whose wages were regulated by the standard trade union rate, clerical employees, temporary assistants employed since the outbreak of war for whom no fixed wages existed at that date, part-time workers and older partially unfit men. Youths of 18 were granted half the additional advances. The agreement was to be valid for six months from 1st January, 1919.

In the same month the Committee was informed of an important agreement between the Engineering and National Employers' Federation and the Shipbuilding Employers' Federation, on the one hand, and the Amalgamated Society of Engineers and unions affiliated to the Engineering and Shipbuilding Trades Union, representing the engineering workers. This agreement, dated 24th December, 1918, reduced hours of employment to 47 per week, leaving the rate of pay unchanged from its level for 53 hours. This constituted an increase for fitters (in the Electricity Supply Industry) of 2½/4d per hour. The agreement came into force on 1st January, 1919. The Electric Lighting Committee was informed by the Secretary of the East of Scotland Association of Engineers and Ironfounders that all the engineering works in Edinburgh were carrying out the agreement, and as the Committee had agreed to abide by the standard rate, the increase was granted to fitters and other skilled engineering tradesmen. As many of these employees worked a shift system of eight hours, it was difficult to reduce their hours to 47 at first and overtime had to be worked.
The Resident Electrical Engineer complained that "there has been so little notice given of this alteration that there has not been time to find out what effect it will have on other employees".

In April, the Amalgamated Society of Carpenters and Joiners claimed back payments of the 12½% award. This had been granted to employees in electricity generating stations by Sir George Askwith, but it was contended at the time (January, 1918) that joiners were not included. Their rates of pay and conditions were regulated by Building Trades awards, and the joiners had been granted the 12½% through these channels seven months after it had been granted to other electricity employees. The Committee resisted these demands, but in April, 1919, a bargain was suggested. Hours of work in the building trades had just been reduced (10th March, 1919) to 44 hours per week. The Committee suggested that if the joiners would consent to come under Engineering Trades (Electricity Undertaking) awards they would be granted existing wages (for fifty hours) for a 47 hour week, and the back payments would be made. The Resident Electrical Engineer met the trade union organiser (Mr. Dalrymple) who seemed to consider the offer to be reasonable. But the men concerned thought otherwise, and negotiations broke down. The matter was submitted to the Arbitration Court which ruled, in September, 1919, that "the men concerned are to be treated as joiners working in the Engineering trade, and are to be paid the 12½% bonus from the beginning of the first full pay day after 13th October, 1917, to 11th April, 1918. Joiners in an engineering establishment are not subject to a working week of 44 hours as prevails in the Building Trade in the district affected".

The masons, however, succeeded in establishing their claim to the Building Trade's 44 hours, but, to ease the problems of management, they consented through their union (the United Operative Masons' Association of Scotland) to work a 47 hour week, the difference being paid at ordinary time rates.

This left unsolved the problem of revised hours of work for the many employees who were outside engineering and building trade awards. Accordingly, an agreement was/
was reached with the N.U.C.W. to introduce a 48 hour week for these workers, but not uniformly. Where longer hours were worked, a reduction of four or six hours was arranged to give suitable benefit. There was no alteration of wages. Shift workers received the ordinary rate for the first two hours overtime, and time-and-a-half after that. Day workers received time-and-a-quarter for overtime above 48 hours. Where Sunday work was performed in the ordinary course of duty there would be no extra pay, but in other cases, time-and-a-half was paid. "Overtime will be reduced," stated the Agreement, "as far as is consistent with the Department and the Community."

This led to controversy as to what was the "ordinary course of duty" in connection with Sunday work. The Committee argued, for instance, that this applied to jointers (men employed on joining cables), but these workers claimed to be paid time-and-a-half for Sunday work. The Resident Electrical Engineer supported the men's claim on this occasion, and they received the full overtime rate from July, 1919. In October, the jointers put forward a further claim. When on emergency duty, a jointer had to be ready for a call to action each night, and on Saturday afternoon and Sunday (one jointer was on duty at a time). An extra two shillings was paid for the week in which a jointer was on emergency duty, and the Committee (upon the recommendation of the Resident Electrical Engineer) decided to increase this sum to four shillings. At this time, a wage increase of 2/6d per week was also granted to switchboard attendants, bringing their weekly wage to 71/2d (35/- plus war bonus of 28/6d plus 12½%).

An award made to the engineering trade on 5th November, 1919, afforded the Committee an opportunity to bring the fitters into line with other skilled workers who were subject to a deduction of ½d an hour if they accepted Corporation benefits. The fitters still enjoyed the preferential treatment which they had won under wartime conditions. This latest arbitration award gave an extra 5/- a week to male workers over 18 (involving, in the electricity supply industry, fitters, brass-finishers, turners, boiler-makers, blacksmiths and joiners). The Committee decided to/
to extend the award to fitters only on condition that they accepted a 2d deduction or relinquished Corporation benefits.

The masons, by November, 1919, had awakened to the fact that joiners had been awarded arrears in the payment of the 12½% and they accordingly claimed payment for the period from October, 1917, to April, 1918. They were overlooking the fact here that the joiners had specifically transferred from Building Trade to Engineering Trade awards to win this claim, and that the price paid by the joiners was a longer working week. Nevertheless, in view of the fact that masons worked a 47 hour week voluntarily at plain time rates (now standing at 1/8%/4 plus 12½%) the Committee met their claim. They also agreed to pay time-and-a-half for all hours worked beyond 47.

On 30th January, 1920, a further advance of 5/- was granted to electricity employees (covered by N.U.C.W. agreements) over 18, with payment of half this amount to workers under 18. The 12½% bonus was extended for a further six months. Excluded from this award were clerical assistants, temporary assistants, part-time workers, old or partially unfit men, and all workers covered by agreements with other trade unions.

The first national agreement reached by the N.J.I.C. was the sliding scale of wages agreement of November, 1921. The agreement provided for a variation in wages of 2d per hour for every six points variation in the official cost-of-living index figure, with the basic rates as agreed in the districts, and calculated as from the datum figure of 120% above the July, 1914, figure. After 1st January, 1922, wages revisions were to take place every three months. The agreement was subject to termination at the end of any period of three months by either party giving three months' notice. In July, 1922, the employers gave notice, and suggested a revision of the agreement.

Their proposals were considered to be so unsatisfactory that these were withdrawn, and others substituted in their place. These proposals would not only have meant a reduction of 6/- a week, but would have reduced the datum figure (below which the sliding scale was not operative) from 120% to 76%; reduced the time lag for/
lag for future adjustments from 3 months to one month, and would have related wage rates in the districts to the rates prevailing in outside private industries.

With the slump in the engineering industry this would have been disastrous. Consequently, the proposals were rejected by the trade union. Later, when the proposals were submitted to the districts, it was decided that the sliding scale agreement should operate until March, 1923, subject to the agreements arrived at, or to be arrived at, by the various District Councils. Thereafter it was renewed at various intervals, and continued to operate until 1928.

So far as standardisation of rates was concerned, very little progress was made. Limited successes were achieved by unions in upgrading an undertaking from a lower to a higher zone.

In March, 1920, the jointers complained that their wages were below those paid in the rest of Scotland. They were granted an additional two shillings, bringing their weekly wage to 85/- (42/- plus a bonus of 33/6d plus 12/6d).

In April, 1920, an Industrial Court award was announced in response to a claim by the Amalgamated Society of Engineers and other societies connected with the Engineering Industry for an increase in bonus amounting to 15/- weekly. The award provided for an extra 3/- from the first pay day after 31st March, and a further 3/- from the first pay day after 31st May. This led to demands from other manual workers, and in May, 1920, the Interim Secretary of the Scottish District Council for the Electricity Supply Industry recommended Scottish undertakings to grant increases in the same 3/- increments to manual workers. The Edinburgh Lighting Committee agreed to this proposal with the amendment that 6/- should be paid with effect from 1st June, 1920. This was because the N.U.C.W. agreement expired on 31st May. This agreement had already paid an advance of 5/- which was not enjoyed by many other undertakings.

The N.U.C.W. claimed an extra three days' holidays for switchboard attendants. The Committee, at its meeting in May, 1920, pointed out that these employees already enjoyed 14 days annually (although these were granted in the summer, and no public holidays/
holidays were given) and that since the introduction of the 48 hour week they have a clear interval of 96 hours (4 p.m. Thursday until 4 p.m. Monday) every five weeks. Furthermore, they were paid overtime at time-and-a-half after the first two hours. The claim was therefore rejected.

In 1920 and 1921, there were lengthy discussions as to the adoption of a schedule of pay and conditions of service for manual workers in the Electricity Supply Industry. This schedule was suggested by the Scottish District Industrial Council in February, and it divided undertakings into categories. Provincial Zones "A" and "B" were established; rates in Provincial Zone "A" were to be 4d an hour below those in the Greater London District, and 2/4d an hour above rates in Provincial Zone "B". Edinburgh was content to accept "A" classification, but the Electricity Committee insisted (31st May) that an additional clause be inserted to the effect that the rate of wages would fall according to the cost of living, and that the schedule of pay should be based on the cost of living as at 1st January, 1921. The Committee's fears were needless; the National Joint Industrial Council was determined to keep wages linked to prices, and it did in fact reduce wage rates by 2d an hour with effect from 17th November, 1921. It was not until 18th December, 1921, however, that Edinburgh Corporation formally ratified the schedules (although accepted them retrospectively from 1st June, 1921). It resolved that "sick pay or any other special benefits, allowances, or privileges granted by the Corporation to the employees in the Electricity Department which are of a kind not specifically mentioned in the schedules be duly terminated as from the adoption of the schedules".

Similar wage reductions were being made in the Engineering trade, and the A.E.U. appealed to the Electricity Committee in a letter of 10th September, 1922, not to put these cuts into operation "in view of the fact that the Electricity Department is not handicapped by foreign competition". This request was not granted. With effect from 1st February, 1923, all workers suffered a 10% reduction in wages; the remaining 2 1/2% of the former bonus was deducted from wages as from 1st August, 1925. In answer to a strong protest from the N.U.C.W., the Committee replied that...
these cuts had been recommended by the Scottish District Industrial Council for the Electricity Supply Industry.

In certain categories, however, small favourable wage adjustments were made. The E.T.U., for instance, claimed an extra 6/- weekly for jointers on emergency duty, pointing out that this duty came round every nine weeks. It also complained that jointers were having to purchase overalls and oilskins out of their wages, and asked for an allowance for these items. The Committee granted an increase of 3/- (bringing the payment for emergency duty to 7/-) and decided to provide the men with oilskins (but not with overalls). In July, 1923, the wages of turbine drivers at Portobello were increased by 5/- weekly in two annual increments.

Certain skilled workmen (fitters, wiremen, meter and instrument repairers) were not included in the Scottish District Council schedule, the intention being that they should be paid the standard rates of pay for their trades. They made repeated requests for inclusion, but the Employers' side of the Council would not agree to the rates of pay suggested, and the matter was referred to the Industrial Court for arbitration. The Court decided on 20th July, 1923, that these grades should be given rates within the schedule; that from the date of the first full pay period following the award, the wages of these men should be 1/4 1/2d (Group A), 1/4d (Group B), 1/5 1/2d (Group C); that these rates should not be subject to the reduction of 2 1/4% due to come into operation on 1st August, 1923, but should be subject to changes made under the cost of living agreement. The Court declared that the award should apply to electrical fitters, electricians, electrical wiremen, mechanical fitters, meter and instrument repairers, overhead power linesmen, and telephone electricians. The award was accepted by the Electricity Committee in September, 1923. In January, 1924, the Amalgamated Society of Woodworkers asked that its members (joiners and skilled men) employed at Dewar Place should come under this award, and their request was granted. In the same year, the Committee resisted the efforts of the N.U.C.W. to secure travelling allowances for workers employed at Portobello.

Motor vehicle drivers secured an increase in January, 1925. At this time they were/
were receiving 1/20 of an hour, but they pointed out that certain other Corporation Departments were paying £3:2:0d a week. The Committee was thus faced with yet another yardstick; most other categories of workers cited wages in similar undertakings in different municipalities in their wage claims. The Committee, on this occasion, was faced with an inter-departmental comparison, and it decided to grant the increase.

An appeal by boilermakers, in September, 1925, for paid holidays was rejected. The Boilermakers' Society was informed that if it wanted the advantages (and disadvantages) of Electricity Supply Industry employees, it would be well advised to join the Scottish District Industrial Council.

In May, 1927, the wages of motor drivers were raised further, this time to 66/-.

At the same time, a proposal to establish a basic minimum wage of 54/- for manual labourers (as proposed by the N.U.C.W.) was defeated by seven votes to four at a meeting of the Electricity Committee. The Committee reiterated its intention to stand by the schedule of the District Council. It is interesting to note that although the Committee instructed its representatives on the District Council to vote for the standardisation of wages on the basis of wages ruling on 30th June, 1927, it accepted the decision of the District Council when it decided to reduce wages by 4/- weekly, as from 1st July. On 18th July, 1927, the N.U.C.W. demanded increases for meter readers, ash plant attendants, greasers, steeplejacks, and painters' labourers. No action was taken; with regard to the steeplejacks (who were engaged upon painting and scraping the steel chimney at Portobello Power Station) the Resident Electrical Engineer pointed out that they were already receiving one penny an hour above ordinary labourers' rates. The same month, a motion to consider schedule rates to be minimum and not maximum was defeated in the Town Council.

In November, 1927, the N.U.C.W. requested the Committee to receive a deputation to discuss four points; the provision of special travelling facilities for men employed at Portobello, the restoration of the 4/- wage cut and the future stabilization of wages, the restoration of sick and holiday pay, and the regrading of switchboard/
switchboard attendants.' The Committee considered that little advantage would be derived from such a meeting; the District Council was concerned with all these points except Item (1) and in respect of this item, it was not the practice of the Corporation to meet such expenses. Upon renewed application by the N.U.C.W., it considered the matter further. Opinion was divided upon whether to meet a deputation upon the subject of travelling expenses only, or upon all four points, and the latter view prevailed by six votes to five. It was eventually decided at the February and March meetings of the Committee (after discussion and investigation) that no action should be taken upon travelling expenses or the wage cut. The question of sick pay and holidays was remitted simpliciter to the District Council for their views, and the Committee recommended the District Council to grant an increase of 2/- per week to switchboard men.

The claim for sick pay and holidays involved the Committee in discussions and correspondence for nearly two years before a solution was reached. The first reply received from the District Council (10th March, 1928) expressed satisfaction that the Corporation was honouring the schedule (a fact which was well known to everyone). This schedule (adopted by the Corporation in 1921) provided that each man, after twelve continuous months' service should receive an annual holiday of seven days, pay to be calculated as for 47 hours, and such holidays to fall between 1st May and 30th September. This provision was applied to workers who were engaged after 1921. Former employees, however, continued to enjoy the old holidays, i.e. one week's holiday with pay, together with four local holidays (New Year's Day, Spring Holiday, Victoria Holiday, and Autumn Holiday). This concession was made under Clause (7) of the schedule which stated:

"Existing rates and conditions: where existing rates and/or working conditions are better than those provided for in the schedule of basic rates issued by this District Council...or in this schedule respectively, no change shall be made in such rates, and/or working conditions as they affect the existing staff."

This meant that men working side by side on the same job received different holidays.
holidays, depending upon the date of their engagement (before or after 15th December, 1921). This differentiation was the basis of the claim by the N.U.C.W., a claim which it renewed in November, 1928, when it demanded that labourers in the Electricity Department should receive four days' statutory holiday in addition to the seven days provided by the District Council rules. The Committee wrote to the District Council (6th February, 1929) asking whether it would approve of the Corporation's granting the request of the N.U.C.W. for four days' extra holiday. The Council replied (30th April, 1929) that it was satisfied that "the Corporation is complying with the schedule so far as holidays of labourers in the Electricity Department is concerned". This reply was, no doubt, intentionally evasive, and the Committee wrote again, demanding a more definite answer. At this point the Employers' side of the National Joint Industrial Council stepped into the arena. In a comparatively short time (only one month later) it drew the attention of the Electricity Committee to the fact that "the schedules for rates of wages, etc., in the various districts are standard rates and not minimum rates...the National Council cannot confirm or approve any local alterations of the schedule rates and conditions". This letter renewed the controversy within the Electricity Committee, which decided by eight votes to six to ignore the National Council employers and grant the four additional holidays. This was the first occasion upon which it had departed from the schedule, and it was hardly surprising that the Salaries and Wages Committee of the Edinburgh Town Council referred the matter back for further consideration. The Electricity Committee, however, reiterated its decision and the extra holidays were confirmed by the Magistrates and Council on 10th October, 1929.

Encouraged by the activities of the N.U.C.W. on behalf of the labourers' holidays, the E.T.U. asked for ten days' holidays. The District Council refused to countenance the request, and in this case the Committee adhered to the District schedule.

With regard to applications for ordinary hourly increases, the Committee continued to reaffirm District Council decisions. In 1928, for instance, it turned down/
down repeated requests for an extra penny an hour for ash plant attendants. Nor did it take action, in February, 1928, over the reduction in the wages of bricklayers employed by Messrs. Angus and Son at Portobello Power Station. It informed the Secretary of the Amalgamated Union of Building Trade Workers that the matter would be more appropriately taken up with the Employers' Federation.

In April, 1931, the E.T.U. drew attention to the difference in wages for wiremen employed at "contractors' rates" and those paid "supply rates" (1/6d and 1/5d respectively at this time, both subject to cost of living variations). The E.T.U. suggested that Electricity Department wiremen employed on City properties should be paid at the contractors' rate, but this request was not granted.

Further wage reductions were being discussed towards the end of 1931. The Employers' side of the District Council resolved to recommend a reduction in the wages of electricity employees by 3/- (for those working a 48 hour weekly wage); 2/11½d (weekly wage of 47 hours) and 3/4d an hour (those paid by hourly rates). The Employees' side sent circular letters to the various undertakings requesting the opportunity to put the workers' viewpoint to employers individually before the District Council held its next formal meeting. The Electricity Sub-Committee, after lengthy discussion, decided by five votes to four to refer the matter to a full meeting of the recently constituted Public Utilities Committee. This Committee in turn referred the matter back to them. By this time over a month had elapsed, and the dispute had been submitted to arbitration (to the relief, no doubt, of the Edinburgh Undertaking, which was thereby relieved of the necessity of arriving at a decision which may have undermined its relations with the workers concerned). The Court's award was announced in February, 1932. It reduced wages by 2½d but excluded those earning under 11½d an hour.

In April, 1932, the joiners discovered that, while they were receiving the Electricity Supply Industry rate of 1/6d an hour for a 47 hour week, the district rate for the building trade was 1/5d for a 44 hour week. It was also pointed out by the Amalgamated Society of Woodworkers that other Corporation Departments paid their/
their joiners 1/6\text{\normalfont d}. The Sub-Committee replied (as it was no doubt entitled to do) that the joiners had asked to be put under District Council rates for the Electricity Supply Industry in 1924 (when the rate was slightly higher than the building trade rate) and it therefore declined to make any change.

Similar complications arose in 1935 and 1937 with the motor drivers and electricians respectively. The motor drivers in the Edinburgh Undertaking asked to be put on a District Council schedule. After some controversy, the Council placed these drivers under schedule conditions (various rates for vehicles of different carrying weight). This meant that six drivers hitherto employed at transport rates secured pay increases from 14.16\text{\normalfont d} per hour to 15.25\text{\normalfont d}. The electricians were not so lucky; they were informed that the extra \text{\smallfrac{3}{2}}\text{\normalfont d} (which they claimed had been awarded to journeymen electricians) did not apply to the Electricity Supply Industry. The District Council made its own awards for workers in this category employed in electricity supply.

In 1937, there was an upward trend in wages. In November, the National Joint Industrial Council resolved that from the 1st December there should be an increase of \text{\smallfrac{3}{4}}\text{\normalfont d} an hour on the schedule rates of all employees included in the various district schedules. The Sub-Committee discovered to its alarm that this increase would cost them an extra £7,000 per annum, but it resolved to give effect to this award.

There was an attempt during 1937 to place some occupations on a more regular basis. Installation testers, for instance, were paid rates according to their experience, at the discretion of the management. The designation was not included in the District schedule, and the Sub-Committee decided to place them on wiremen's rates (amounting, in 1937, to 70/6\text{\normalfont d} weekly). This involved increases, for the testers, of amounts ranging from one to three shillings. It was also decided to redesignate meter fixers; they were henceforth to be called "meter inspectors", and their wages increased from 66/5\text{\normalfont d} to 69/-. "Prepayment meter readers" were granted \text{\smallfrac{3}{2}}\text{\normalfont d} an hour above the district rate for meter readers, in view of the extra responsibility/
responsibility involved in collecting money. The N.U.P.E. had asked for 10/- extra, but this was rejected. The wages of night telephone attendants were increased from 50/- to 52/6d.

In November, 1937, the question of "dirty money" was raised by the N.U.P.E. The District schedule laid down an extra 2/6d daily for workers employed "in internal cleaning of boilers and flues", but it also provided elsewhere for one penny an hour extra for "work of a very dirty nature". Workers engaged at Portobello on the dismantling and re-erecting of pre-heaters were paid an extra penny, but they now claimed the extra 2/6d per day instead. The Engineer and Manager suggested that the schedule was being properly observed, and no action was called for. An amendment was moved that the Sub-Committee visit Portobello Power Station to examine conditions, but it was defeated by five votes to three.

The hoary question of holidays for building tradesmen was raised again in 1938. Masons, joiners and painters, in spite of repeated requests, were denied paid holidays. The argument of the management was that they had only themselves to blame. They had kept out of the Electricity Supply Industry District and National Council because they enjoyed higher rates of pay; to claim E.S.I. holiday concessions was wanting to eat one's cake as well as having it. Masons and joiners received 3/4d an hour above other tradesmen, while painters received 1/2d more. In May, 1938, a compromise was arrived at. The masons agreed to the deduction of pay for one half hour per week (of 47 hours) from their wages, amounting to 25 1/2 hours a year. This meant that they were receiving holiday pay for 21 1/2 hours (to make up a 47 hour week's holiday). This concession, granted through the efforts of the Building and Monumental Workers' Association of Scotland, was extended to joiners and painters.

In June, 1938, the N.U.P.E. applied for increases for the riggers employed at Portobello, and the two men concerned were called before a meeting of the Electricity Sub-Committee. It was pointed out by the Engineer and Manager, however, that they were receiving the same rates as were paid at Glasgow (1.485d an hour) and the application was refused.
There were further all-round wage increases towards the end of 1939. An extra £/4d an hour to all employees was awarded by the District Council in December. In January, 1940, an extra 1/2d an hour was awarded to labourers who had been transferred from day work to shift work for the purposes of Civil Defence. In April, a National Joint Council decision announced that: "In lieu of the present increase of £/4d an hour which operated from December, 1939, there shall be a war bonus of 1/2d an hour, such bonus to be reckoned in calculating overtime. There shall be no alteration of this bonus for a period of three months from the date of its operation...The bonus shall be applied in full to all zones...the grounds for the granting of the bonus are common to all zones."

In October, 1940, the National Joint Council for the Building Industry announced an extra 1/3d an hour for all operatives under its jurisdiction. These categories at Edinburgh, were masons, bricklayers, joiners, and labourers. In June and September, 1941, there were further increases of a 1/3d which, on each occasion, were followed by awards to the painters of 1/3d by the Joint Council of Scottish painters and decorators.

Further Electricity Supply Industry awards followed regularly throughout the war, mostly emanating from the National Joint Council. In March, 1941, the war bonus was increased to 2 1/4d, and a meal allowance of 1/6d was granted for overtime (over 1 1/2 hours) worked without due warning. The bonus rose to 2 5/4d in August, 1941. An increase was granted by the District Council in June to bring Scottish rates nearer to the average. Unskilled workers received an extra 1/4d an hour, and semi-skilled an extra 1/2d, and these increases were regarded as falling outside the definition of "war bonus". Increases in the bonus continued to be granted in February, 1942, (5/4d); September (1/2d); April, 1943 (1/2d); September, 1943, (1/2d); April, 1944 (1d); and a further 1d in 1945 brought the total war bonus to 7d an hour. Building trade workers were awarded comparable increases stage by stage, although their increases lagged slightly behind electricity awards.

Changes also took place during the war period in the wages of employees falling outside/
outside the joint council machinery. In 1940, the position of "cut off inspectors" was reviewed. The Electricity Sub-Committee possessed statutory powers to cut off electricity supplies when "customers cannot otherwise be persuaded to pay their accounts". Three men were employed (in difficult periods this number was increased to five) to visit consumers with the final warning, and, if possible, persuade them to pay. This job was not a designated occupation in the District Council schedule, and the practice was to pay these men ½d more than labourers. It was pointed out in December, 1940, that, whereas these "cut off inspectors" required considerable skill and tact, and were responsible for handling money, they received less than ordinary meter readers (whose rate was ½d an hour above labourers). Their wages were brought up to those of meter readers. In December, 1941, the wage of the Dewar Place door attendant was reconsidered. This man, who was partially disabled, received 57/6d weekly (47/6d plus 10/2d bonus) and it was decided to fix his wage at six shillings below the weekly wage of labourers. This meant an increase at this time to 62/5d for a 47 hour week. In February, 1942, the District Council introduced the grade of "crane man" into their schedule, at one penny above labourers' rates. In December, 1942, the "cut off inspectors" were brought up to the level of meter repairers (an increase of .75d an hour above meter readers).

Shiftworkers were covered by two awards issued in January, 1945, by the National Joint Council; one referred to shiftworkers paid according to district rates, and the other according to separately negotiated agreements. The Edinburgh employers operating under special agreements (switchboard attendants, and sub-station attendants) received no increase, as they were already receiving wages based upon their more onerous operating conditions. Other shiftworkers, however, received increases of 2d or 1d an hour (according to working conditions) beyond the corresponding rates of day workers. The higher rate applied to those whose shiftwork included Sundays. In March, 1946, a comprehensive award was made to all day and shift workers. It raised the existing war bonus from 7d to 6d ("to apply to all zones and be reckoned in calculating overtime"). Shiftworkers were divided into "rotating" and "alternating/
"alternating" shift categories. The former received 1½d above day rates for working Sundays but not nights; 1½d if working nights but not Sundays; and 3d if working both Sundays and nights. "Alternating" shiftworkers received 1½d, if not working Sundays, and 3d if they did.

In June, 1946, the E.T.U. raised the question of "stand-by" payments for jointers and their mates, which at that time were 7/- and 5/- respectively. The E.T.U.'s claim for a payment of 30/- was submitted unsuccessfully to the District Council.

In January, 1947, a new National Agreement was made by the National Joint Industrial Council. All rotating or alternating shiftworkers were awarded 4d and 2d an hour more than day workers (depending upon whether they worked Sundays). Holidays (after three months service) were now fixed at two weeks annual holidays with pay, plus six public holidays with pay, for day workers, and three weeks holidays with pay for shiftworkers. A 44 hour five-day week was introduced, and in March, 1948, there was an increase in all wage rates of 1½d an hour.

Post-Nationalisation.

The Edinburgh Undertakings passed under control of the British Electricity Authority's Divisional Controller and the South East Scotland Electricity Board on 1st April, 1948. One of the first acts of the new National Joint Industrial Council (see page 502) was to remove the wage differential of 3¼d an hour between undertakings in "A" and "B" zones by upgrading the "B" employees (July, 1946). It was obvious that the 3¼d differential could not justifiably be continued when undertakings from "A" and "B" zones alike came within the single operation of an Area Board or Generating Division. This, however, did not benefit Edinburgh workers who already enjoyed "A" rates.

A new agreement was drawn up by the N.J.I.C. on 20th July, 1949. It confirmed that forty-four hours (worked on Monday to Friday inclusive) should constitute a normal working week for a day worker. Day workers employed on overtime during the period/1.

1. Day workers in the industry were listed in "Schedule A" of the Agreement. This list is substantially the same as that given on page 440 above, embracing unskilled, semi-skilled and skilled manual workers.
period Monday to Friday were to be paid at the rate of time and a half from normal stopping time until midnight and thereafter at the rate of double time until the normal starting time on the next day, provided that anyone called in at 6 a.m. or later should be paid at the rate of time and a half. Time worked on Saturday from normal starting time was to be paid at time and a half, and all overtime worked on Sundays and public holidays was to be paid at the rate of double time. Provision was also made for work done during "normal meal times". Either the worker was to be paid time and a half, or he should be given time off immediately after his normal meal hour, equivalent to one and a half times the time worked. Men called in to work and then not required (or required for a period of less than two hours) were to be paid for a minimum of two hours, calculated at appropriate rates for the day and time. Day workers leaving work after midnight were paid at the rate of single time between the time of leaving work and the normal starting time on that day. Day workers required to work exclusively during the night for not less than three nights were paid at the rate of time and a third. Shift workers were to perform their forty-four hour week in normal shifts of eight hours and one shift of less. Slight adjustments were made in the former wage differentials for shift workers; henceforth "a shift worker shall be paid a shift rate to be ascertained by enhancing the day rate by 2d an hour. Time worked by the shift worker on Sunday during the normal shift shall be paid at the rate of double time; time worked on a public holiday during the normal shift shall be paid at the rate of time and a half." Time worked before or after normal shifts should count as overtime, and time-and-a-half was paid for the first four hours and double-time thereafter, all overtime being calculated on the shift rate. Shift workers called to work on their normal day off should receive double-time. Four hours appropriate overtime at least must be paid to shiftworkers called in to work, whether they work four hours or none at all.

The new agreement made slight improvements in holidays. Qualification for holidays was reduced from one year to ten months' service, and the term "holiday period" in the agreement was defined as the period between the 1st April and 30th September.
September. Day workers, regardless of length of service, henceforth received holidays with pay on public holidays; if required to work on these days they received very generous remuneration. In addition to a normal day's pay, they received payment at the rate of single time for the hours worked on the public holiday, and time off with pay equivalent to the normal working hours of the public holiday concerned. "Qualified" day workers enjoyed an annual holiday of two consecutive weeks with pay. Unqualified day workers received graduated holidays ranging from one day for one month's service with an additional day for each month's service until the qualifying period was reached. "Qualified" shift workers enjoyed an annual holiday of three weeks plus an additional shift of eight hours with pay at the shift rate. Two consecutive weeks were to be taken during the holiday period and the remainder of consecutive or non-consecutive days to be mutually agreed between the shift worker and management. In the case of the death of an employee, his "personal representatives" were to be paid an allowance in lieu of holidays with pay to which he was entitled and which he had not received. All the concessions in the Holiday section of the new agreement were not one-sided, however. The final clause stated:

"In view of the difficulty of making arrangements for holidays provided in this agreement, it is hereby agreed that the Trade Unions' members and the employees will give all possible assistance to the Board to enable the arrangements to be made, including any readjustments of shift rotas after reasonable notice."

Although "all possible assistance" is somewhat ambiguous, the gesture seems well-intentioned. One important concession by the Authority to the workers (and one which was the subject of lengthy controversy before being incorporated in the agreement) was that, where a public holiday fell on a Saturday, day workers were entitled to a holiday on the next normal working day following the public holiday.

The agreement was also generous to the workers in the matter of travelling allowances and "excess rates". Employees travelling in their own time and at their own expense to a place other than their normal workplace received travelling expenses on the basis of 1/4d a mile, with pay at the rate of single time on the basis of.
twelve miles per hour. Employees taken anywhere in transport provided by the manage-
ment could not claim travelling expenses, but they could claim to be paid for the time, as outlined above. Employees permanently transferred, at the request of the Board from one place of employment to another, could (if they now had further to travel) claim travelling expenses in respect of the excess distance for a period of six months. Employees who needed lodging accommodation when working away from their appointed centre could claim 6/6d per night, or any sum above that which they unavoidably incurred.

New clauses provided that employees required to carry out work in contact with acid, or under conditions of dirt abnormal to his grade, should be paid 2d an hour above the day rate unless adequate protective clothing was provided, in which case the amount should be 1d an hour. "Exceptional temperature conditions due to the shortage of boiler plant or other special circumstances" was also to qualify for an excess rate, to be determined locally. 2d above the labourers' rate was henceforth paid to men operating mechanical breakers or pneumatic tools, or timbering in trenches or excavations. (Where these trenches were in running sand, 4d above the labourers' rate was paid). Men working on transmission towers 200 feet or more above ground level received 3d above the rate. Where the work made water-tight boots necessary, 1d above labourers' rate was paid. Employees authorised to "open, isolate and earth high voltage apparatus" were paid 1d an hour above the day rate appropriate to his grade. The national agreement reaffirmed that conditions and pay for "non-able-bodied employees" should continue to be agreed locally. Contracts of service could be terminated by seven days' notice by either party, except in cases of serious misconduct, when immediate notice could be given.

As from 31st May, 1949, the N.J.I.C. decided that the schedule rates of pay should be increased by 1½d an hour. A further increase of 1½d an hour was awarded by the N.J.I.C. on 19th January, 1951.

In April, 1951, the Trade Unions asked for an increase equivalent to 10% in the rate of wages of all manual workers, and the matter was considered at several meetings/
meetings of the N.J.I.C. The Electricity Boards offered a 5% increase on schedule rates, and refused to increase their offer beyond this level. This was unacceptable to the workers, and the claim was referred to the Industrial Court for settlement. Manual workers at some power stations, however, impatient of the delay, instituted an embargo on overtime working, although this action was condemned by the N.J.I.C. at a specially convened meeting.

Pending the hearing of the difference, further consideration was given to the wage claim, and as a result agreement was reached on an increase of 2d per hour on all schedule rates, with effect from 1st June, 1951. It was also decided to examine further the wage rates of craftsmen and of certain boiler-house and turbine-room grades.

The N.J.I.C., after a comprehensive survey, agreed that craftsmen should receive an additional 2d per hour from the first full pay period following 20th December, 1951, thus restoring to the 1947 level the differential between craft and unskilled rates, which had been reduced as a result of general flat-wage increases. Stokers operating the higher-pressure boilers and turbine drivers engaged on the higher-capacity machines also received an increase of 2d per hour, whilst stokers employed on the smaller boilers received 1¼d and the remaining turbine drivers 1d. By these means, the relationship of the grades in Schedule A of the national agreement was maintained.

A further claim was made by the Trade Union on 20th March, 1952, for an increase of 3d per hour to all grades covered by Schedule A of the national agreement; for a re-classification of the grades with Schedule A so far as, in the words of the claim, to "re-value the grade designations to conform to their value to the industry"; and for the removal of certain grades from Schedule A to a separate schedule whereby weekly rate of pay would apply.

During 1952, the National Council continued their review of the position of grades not specified in Schedule A of the national agreement of 20th July, 1949; and certain employments were graded and brought within the Schedule.
Following an application by the National Federation of Building Trades' Operatives for an increase in wages, the National Joint (Building and Civil Engineering) Committee agreed that an increase corresponding to that for other manual workers should be given, and accordingly their wage rates were increased by 2d per hour from 1st June, 1951. Similarly, an additional 2d per hour was given to craftsmen from the first full pay period following 20th December, 1951.
Foremen and Chargehands.

The wages of foremen and chargehands were originally fixed at the discretion of the management, although wages prevailing for tradesmen in the district were taken into consideration when deciding the wages of foremen and chargehands who were also tradesmen. Differentials were also observed in intermediate categories. When, for instance, the wages of caulkers were increased from 24/- to 26/- in 1912, foremen caulkers received an increase from 34/- to 36/-, and when the caulkers received an increase of 1d an hour in 1916, (7d to 8d), foremen's wages were increased to 38/- weekly. Although the Resident Electrical Engineer frequently referred to the foreman's "weekly wage" as apart from the worker's "hourly rate" the calculation in each case seemed to be on an hourly basis. In 1914, 1915 and 1916 (the years when nearly all rates rose) foremen jointers' wages increased from 45/- to 50/- to 52/-, while in that period the wages of senior jointers (men of longer experience) rose only from 45/- to 46/-, and of junior jointers from 40/- to 41/-.

Jointers enjoyed increases from 6d to 6½d to a scale fixed at 2d an hour above labourers. Foremen lamp trimmers in this period retained a difference of 10/- above the men in their department, rising from 40/- to 43/- as the wages of their subordinates rose. The wages of Yard Foremen rose from 34/- to 36/- to 38/-, thereby maintaining their differential with ordinary labourers. Foremen lamp mechanics gained increases from 42/- to 44/- between 1914 and 1916. Road Work Foremen (supervising ordinary labourers) stayed at 36/- during this period, until, in 1916, they were placed on a scale 3d an hour above labourers, who by this time were receiving 7d an hour. The wages of Leading Firemen rose from 35/9d to 35/- to 37/- (preserving the differential almost exactly); of Leading Drivers from 35/4d to 36/- to 38/- (a reduction in the differential with drivers from 3/4d to 1/6d); of Leading Fitters from 39/2d to 42/- to 43/- (keeping pace with the district rate for fitters). The wages of Leading Turners remained constant in this period at 42/-. The wages of the Station Foreman rose from 48/- to 50/-. All the foregoing increases were in basic rates and did not include war advances or the Committee on Production's award of 12½.

It/
It will be observed that in this period of fluctuating wages during the first world war there was no comprehensive policy with regard to foremen's wages. In some cases increases were granted promptly consequent upon increases in rates to the men, but in other cases no action was taken. The foreman in the most responsible position, i.e. the Station Foreman, received an increase of 2/- only, per week.

The next increases for foremen came in February, 1924. The Station Foreman (who was receiving a total bonus of 21/- a week in addition to the basic wage fixed in 1916) was granted an increase of 5/- weekly, and the Yard Foreman (who was now receiving 19/9d bonus in addition to his 38/-) was granted 4/-. The Committee added as a rider that "if any increases are granted by the Joint Industrial Council, it shall be the option of the Corporation to impute the increase granted here to account pro tanto of any such increases as sanctioned aforesaid". This qualification was a timely one, as in March, 1924, the foremen would have benefited from a 5/- increase awarded by the District Council. Owing to the foresight of the Committee, this new award resulted in an increase of one shilling only for the Yard Foreman, the Committee's award of February counting towards the District Council's 5/- increase.

Several new positions were created after the war which fell into intermediate categories. Such posts included that of Meter Inspector (with a wage of 65/1ld), Sub-station Inspector (70/6d), and Cable Inspector (61/6d). These men were paid weekly, and in status were closer to the foreman category than either the day workers on one hand or the technical staff on the other (although the distinction is somewhat arbitrary).

In January, 1927, an increase of 5/- weekly was granted to the Meter Inspectors and the Sub-station Inspectors, 3/1ld to the Cable Inspectors, and 4/1ld to Foreman Jointers (who were at this time receiving a total of 82/6d). The Sub-station Inspectors received a further increase of 5/- in December, 1928. The Yard Foreman was the next to receive an increase, being granted a weekly wage of 67/9d in 1931. He remained at this wage for six years, being raised to 72/9d in February, 1937. There was some discussion at this time about the wage which should be paid to Assistant Testing...
Testing Inspectors, but as the rate fixed was that for wiremen, this position is best omitted from consideration in this section. In 1939, the Senior Foreman at Portobello Power Station (who was receiving 63/5d weekly, i.e. 10/- above the fitters' wage) was granted an additional ld an hour for his 47 hour week. In 1940 the wage of the Foreman Joiner at Dewar Place was reconsidered. Although he received ld an hour above the tradesmen's rate, the difference was not considered sufficiently great. When joiners were employed on certain types of work they received ld an hour more, which brought their wage up to the foreman's. It was decided to grant the foreman 2d an hour above the standard rate. In December, 1942, the Foreman Joiner received a further ld an hour, bringing his wage to 3d above the standard rate. The Foreman Painter also applied for an increase in his rate (ld above the painters') but it was not until March, 1944, that he was awarded an increase to 2d above the trade rate. In 1942, a new foreman's rate was established; that of Mechanics' Shop Foreman, to be paid 2d above the fitters' rate.

In February, 1945, the Engineer and Manager suggested that there should be an equalisation of rates to foremen at the Portobello Power Station. These foremen were in charge of Turbine-house, Boiler-house, and Machine Shop. The first was responsible for the work of fitters handling steam turbine and auxiliary overhauls, and maintenance work on the main switchgear; the second supervised work on boiler fittings and the work of stokers in the boiler-house; and the third supervised the machining and welding of material for the first two department. Although the degree of responsibility was similar in each case, the rates varied considerably. The Turbine-room Foreman received 2/5.06d an hour (4.56d above the fitters' rate), the Boiler-house Foreman received 2/4.06d (2.56d above the fitter) and the Mechanics Shop Foreman received 2/3d (2d above the fitter). The Engineer suggested that the foremen of the three groups should be brought up to the highest (i.e. 5.56d above the trade rate). "I can assure the Committee that, having regard to essential function of these foremen in controlling the true cost of repairs and maintenance, the additional wages will be well spent...the extra cost to the Department will be
some £26 per annum."

In October, 1946, the E.T.U. complained that certain men at Dewar Place were performing duties (for an extra 1d an hour) which had hitherto been considered to be charge-hand duties. The Committee agreed to pay 2d an hour and redesignate the men performing this work "assistant foremen"

post-Nationalisation.

On 20th July, 1949, a national agreement was drawn up by the new National Joint Industrial Council for the Electricity Supply Industry. The position of foremen and charge-hands was clarified. It was agreed that the day rate for an employee appointed to be a foreman should be mutually agreed between the Board and the appropriate Trade Union, such rate to be not less than 4d per hour higher than the day rate of the highest paid employee (other than a charge-hand) under his control. With regard to charge-hands, an employee so appointed should, if in charge of two to five employees of skilled grades or six to ten employees of semi-skilled or unskilled grades, be paid 2d an hour more than the highest paid employee under his charge. If in charge of six or more employees of skilled grades or eleven or more employees of semi-skilled or unskilled grades, be paid 3d an hour more than the day rate of the highest paid employee under him. This latter clause was qualified by one exception; if a foreman were in charge of the gang, the charge-hand should receive only 2d extra.

The positions of cable gangers, leading driver, leading stokers and leading public lighting attendants were also recognised. These men were granted 2d more than their subordinates, or 3d if in charge of six or more skilled workers or eleven or more semi-skilled or unskilled grades.

Foremen and charge-hands enjoyed two automatic increases of 1½d an hour on 31st May, 1949, and 19th January, 1951, when these awards were granted by the N.J.I.C. to all manual workers under their jurisdiction.
Technical Engineering Staff.

This category of employees embraces all qualified engineers, whether engaged on generation or distribution. I have also included senior engineers who are outwith the salary ranges of Joint Board schedules. The official definition of "technical engineering staff", for the purpose of salaries and conditions of service, stops short of senior executive positions. It would be confusing, however, to apply a recent classification retrospectively to this category. Indeed the word "category" itself involves a spurious unity; the boundaries of this group of employees have been somewhat fluid over the period of time under review. To add to our difficulties there have been the usual changes of nomenclature from time to time. If we adhere to our definition of qualified engineer (excluding student apprentices or graduate trainees), we need not be intimidated by the formidable designations (frequently concealing quite simple and straightforward duties) which crop up throughout the existence of the Edinburgh Undertaking.

Sir Alexander Kennedy was Chief Technical Adviser to the Corporation, Chief Electrical Engineer, and Consulting Engineer respectively, but his duties throughout the last two phases were similar. He continued to manage his own firm in London, but he was responsible for the Edinburgh Undertaking, and paid frequent visits. Day-to-day administration was in the hands of a Resident Electrical Engineer, assisted by a Chief Assistant Engineer, a station superintendent at Dewar Place, station engineers, mains superintendent and meter superintendent. Hours worked were officially 56, but considerably longer was usually worked, and no overtime was paid. The station engineers, for instance, were not only responsible for running the plant for eight hours daily but also for repairs and maintenance which frequently had to be done outside this period. In October, 1911, as the Undertaking faced its maximum winter load, the turbines and dynamos were in bad state of repair, and all the engineers were working far in excess of 56 hours. The Resident Electrical Engineer (Mr. Newington) had a nervous breakdown early in 1912; the Station Engineer at McDonald Place was ordered by his doctor to stop work for six months, and he died shortly/
shortly afterwards. There were several other casualties through working excessive hours; the Chief Assistant retired through ill-health in 1913. A new Chief Assistant was appointed at a salary of £400 (rising to £500). The Resident Electrical Engineer received £700, while the Station Engineers received £270. In January, 1913, it was resolved that the salaries of the Station Engineers be raised to a maximum of £330 "in such increments as may be recommended by the Resident Electrical Engineer". Station Engineers at this time received a maximum of £200 per annum. The Superintendents of Mains and Meters respectively received maximums of £300 and £275.

To relieve the pressure of work and long hours, an Assistant Station Superintendent (salary scale £200-£250) was appointed in 1913, and shortly afterwards an Assistant Meter Superintendent was appointed at a salary of £130 per annum.

During the war various war bonuses were granted at the discretion of the Committee. The Chief Assistant Engineer received none; the Station Superintendents received £84 per annum; the Station Engineers from £62:10/- to £62:14/-; the Assistant Station Superintendent £88:2/-; the Mains Superintendent £86:2/-; the Assistant Mains Superintendent £82:4/-; the Meter Superintendent £85:12/-, and his Assistant £86:17:3d.

These bonuses were the amounts prevailing by the end of the war, and they included, in addition to the awards made by the Electric Lighting Committee, an award of Sir George Askwith announced on 7th January, 1918, (see page 444), to employees at Electricity Generating Stations. In granting the 12½% to employees who had not received more than 20/- was advance, Sir George specifically included the technical staff. "As regards members of the Technical Staff, it was felt that at least some of them whose status borders on certain of the skilled men receiving the 12½% would be placed in an unfair position unless some consideration was given to them...The question how far this consideration should go and which members of the staff it should include is, however, a matter for the employers themselves to arrange." Sir George thus very neatly side-stepped all the complications arising from this award. The Edinburgh Undertaking finally decided to grant the 12½% to employees/
employees on the technical staff receiving up to and including £200 per annum, and 10% to those receiving more than £200 and up to and including £250 per annum.

In addition to the bonuses, various normal increases were granted during the war. In 1916, for instance, the Chief Assistant Engineer received an additional £20 (bringing him up to £445) under the discretionary authority granted to the Resident Electrical Engineer. Increases of £10 were granted to the Station Superintendent, the Assistant Superintendent and one Station Engineer. In 1916, new maximums were fixed for the Superintendent of Mains (£400), his Assistant (£250), Station Superintendent, McDonald Road (£400) and Dewar Place (£300), Station Engineers (£250) and Superintendent of Meters (£300). The Chief Assistant Engineer received an increase from £445 to £500 in 1917, and the following year his maximum was raised to £600 in two increments. The Resident Electrical Engineer received an increase from £650 to £1,000 in February, 1918.

It will be observed that while the lower categories enjoyed higher bonuses as a consequence of the war, the senior engineers succeeded in consolidating their positions by securing increments in their basic salaries. In October, 1918, however, demands of far-reaching importance were put forward by the Electrical Power Engineers' Association (a trade union which had been formed in 1913). The E.P.E.A., on behalf of technical engineers ranging from Junior Charge Engineers to Deputy Chief Officials, demanded that new salaries should be paid on the following basis: the salary paid at 31st July, 1914, plus merit and grade increases between that date and 31st March, 1918, plus 20%, plus an additional sum at the rate of £90 per annum (war advances and war bonuses to be merged in the above). The I.M.E.A. immediately circularised all its constituent associations, and Edinburgh received a communication in January, 1919, informing the Undertaking of these demands, and recommending sympathetic consideration. On 30th January, 1919, the E.P.E.A. announced that unless its claims were met within seven days, a strike would be called. It was decided to submit the dispute for arbitration under the Conciliation Act of 1896, and Edinburgh concurred in the proposed proceedings. The award of Mr. W. H. Stoker, K.C., which
was announced on 27th February, 1919, conceded the E.P.E.A.'s claim as from 31st March, 1918. Even employees who had left their undertakings since that date were entitled to advances for the period during which they had been employed. There was one amendment, however, to the original claim; in the case of advances which had been given partly to meet the cost of living and partly on other grounds, the 20% was not to be allowed on that portion given to meet the increased cost of living.

This last clause created some difficulties for the Edinburgh Undertaking. The Committee was not certain, for instance, whether its last increase to the Chief Assistant Engineer (a £50 increment from 1st January, 1919) had been partly influenced by economic conditions. A few days before the award, the Committee had granted an increase of £25 per annum to the Assistant Meter Superintendent, partly to meet the increased cost of living. It finally decided, however, to interpret these increases as basic, and not as advances. This meant that not only were these increases not deducted from the £90 increase, but they also counted towards the 20%.

The effects of the Stoker Award (the most important in the history of the technical engineers' union) can be judged from their consequences to the Edinburgh Undertaking. The Chief Assistant Engineer received an increase of £110 (20% of his salary) plus an extra £90 bonus, making a total of £200.

The following table shows the increases secured by the technical staff through the Stoker Award, and the further increases which were gained on 1st June, 1920, when a National Joint Board Schedule was put into operation:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Increases through Stoker Award</th>
<th>N.J.B. Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20% on £90 bonus less Total</td>
<td>New basic salary</td>
</tr>
<tr>
<td></td>
<td>Salary existing bonus Increase (bonus converted into salary)</td>
<td></td>
</tr>
<tr>
<td>Chief Asst. Eng.</td>
<td>£110</td>
<td>£865</td>
</tr>
<tr>
<td>Station Supt.</td>
<td>64</td>
<td>564</td>
</tr>
<tr>
<td>&quot;</td>
<td>54</td>
<td>523</td>
</tr>
<tr>
<td>Asst. Stn. Supt.</td>
<td>45</td>
<td>491</td>
</tr>
<tr>
<td>Station Engineers (4)</td>
<td>40</td>
<td>365</td>
</tr>
<tr>
<td>(2)</td>
<td>32</td>
<td>349</td>
</tr>
<tr>
<td>(1)</td>
<td>28</td>
<td>349</td>
</tr>
<tr>
<td>MainsSupt./</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The introduction of the 48 hour week in 1919 meant that additional engineers had to be appointed. Two station engineers were appointed, one to employ his whole time in the economy of coal (at a total maximum salary, including bonuses, of £450). It was estimated that this latter appointment would save £800 in coal. This prompted one shrewd councillor to suggest that the man appointed should be paid according to results, but the proposal was not adopted. There was one reduction in the technical staff, however, in September, 1919. Upon the retirement of the Assistant Station Superintendent at McDonald Road no successor was appointed. Instead, a clerical assistant was engaged at a salary of 32/- weekly, plus war bonus.

The acceptance by the Corporation of the schedule of the new National Joint Board for Technical Engineering Staffs meant further substantial increases in 1920. This schedule graded undertakings (and salaries) according to plant capacity. Generating stations covered by the schedule ranged from 1,000 kw. to 100,000 kw., and members of the staff were placed in ten grades. Plant capacity was, of course, a technical fact, easily established (the higher the capacity, the more responsible the work of the engineer, and the higher therefore his pay), but movement from grade to grade depended on the work performed within the Undertaking. The schedule laid down a forty-hour week (although this was already operative in the Edinburgh Undertaking) and provided for seven days holiday after eight months' service, and fourteen days after twelve months. There was an addition of one day's holiday for each further year of service up to a maximum of 21 days per year.

In 1919, there were discussions by the I.M.E.A. Council for a scale of salaries for/
for Chief Electrical Engineers, but the Edinburgh Undertaking continued to pay according to its own judgement. In 1922, the title of the Resident Electrical Engineer was changed to "Engineer and Manager" and that of Sir Alexander Kennedy to Consulting Engineer. The Engineer and Manager was now earning £1,050, and a proposal to increase it to £1,250 in January, 1924, was defeated by the Edinburgh Town Council. In November, 1924, upon the retirement of Newington, the Chief Assistant Engineer (Mr. Seddon) was appointed to his position at £1,200. Sir Alexander Kennedy lost his post in the reshuffle.

The new N.J.B. scale caused certain complications. When the Station Engineer was transferred from McDonald Road to Dewar Place, his salary should have been reduced (under the schedule) from £336:10/- to £322:16:6d, in view of the lower plant capacity of Dewar Place. The Committee decided, however, not to reduce the salary. The recently opened Portobello Station qualified, of course, for higher rates. The Station Superintendent received £627:7:7d (compared with the £625 salary of the Dewar Place Station Superintendent). The technical staff was subject to variations in the cost of living. The Agreement stated: "On the first day of January, April, July and October in each year the cost of living shall be ascertained by reference to the latest available figure published in the Labour Gazette as the 'General Level of retail prices and rents above the level of July, 1914' and from each complete increase or decrease of 5% from 75% there shall be added to or deducted from the remuneration the following amounts:--

£1:6:6d per centum per annum on the first £200, and 6/8d per centum per annum on the remainder of the remuneration."

The figure of 75 points above the ascertained Cost of Living in July, 1914, was thus taken as the basis. The Committee suggested that certain officials should be excluded from variations in the Cost of Living, e.g. the Boilerhouse Superintendent at Portobello (appointed at £425) and the recently appointed Sales Superintendent (£520), but the Town Council reaffirmed that all salaries should vary with the Cost of Living. When the salary of the Chief Assistant Engineer was increased from £655 to/
to £750 in 1925; the Committee again suggested exemption from cost of living variations, but the Town Council, at its May meeting, decided against this proposal. The extensions to Portobello meant an upgrading of that station, in 1929, from "G" to "H" with a consequent increase in salaries for the technical staff. These increases ranged from £16 per annum to the lowest grades, to £26 to the highest, and were automatic. Movement within the grades was, however, at the discretion of the Committee. The Mains Superintendent in January, 1927, was raised from Grade 4 H (£601) to Grade 3 H (£636); the "H" grading remained constant, of course, as long as the plant capacity was the same, but the movement from "4" to "5" was a promotion decided by the Committee. In this particular case, however, the Town Council (on the 3rd March) rejected the increase, but it was restored, after strong protests by the E.P.E.A., in July, 1927. The Engineer and Manager's salary (£1,200) was at this time below the salaries paid by comparable undertakings, and the Committee raised it in 1927 to £1,400. This, however, was not confirmed by the Town Council. The Chief Assistant Engineer suffered a similar fate; the recommendation of the Committee to increase his salary from £750 to £800 perished on the floor of the Council Chamber.

The Associated Municipal Electrical Engineers intervened on behalf of the Engineer and Manager. In December, 1927, it called to the attention of Edinburgh Corporation "the fact that there is an agreed scale of salaries for Electrical Engineers, established as a result of negotiations between the Committee of the I.M.E.A., representing local authorities, and the A.M.E.E. as representing Chief Electrical Engineers, the negotiations being conducted on the Whitley principle, with the concurrence of, and under the auspices of the Minister of Labour". It added that salaries were based upon the annual output of an undertaking in Board of Trade units sold, and as the appropriate annual output of Edinburgh was 92,000,000 units sold, the salary payable to the Engineer and Manager should have been £2,183 instead of £1,200. The Electricity Committee forwarded the letter to the Salaries and Wages Committee recommending them "to give the matter their favourable consideration". It was finally decided to raise the maximum salary of the Engineer and Manager.
Manager to £1,500.

The N.J.B. schedule was extended from time to time to include "borderline" categories. Draughtsmen were brought in during 1926 (Grade 10 G, £227 per annum). Switchboard supervisors were also included at the Grade 9 (A) G level (£263.2.5d) which meant an increase of £13 on their previous salary, and when the Portobello extensions were completed (bringing it into the "H" grade), their salaries rose to £526.9.7d. Transfers from Dewar Place to Portobello also involved salary adjustments. Dewar Place had been scheduled as "E", whereas Portobello, by 1930, was "H". To avoid too rapid increases in salary, the Committee would sometimes adjust the man's position within the grade. When the Station Superintendent of Dewar Place (Grade 3 E, £505) was transferred, consequent upon the closing down of his station for generation purposes, to Portobello, his new post as Assistant Station Superintendent was graded 5H (£566 per annum). The Shift Engineer at the same time, however, enjoyed a larger increase on transferring to Portobello. He was redesignated "Boilerhouse Shift Engineer" and his salary increased from £314 (Grade 8E) to £352 (Grade 8aH).

The Engineer and Manager continued to recommend increases within the grades. In 1931, he suggested that the Technical Assistant's salary of £424 (Grade 7H) be increased by two annual increments of £25, and one further annual increment consisting of the balance, to £502 (Grade 5H) and that the Assistant Mains Superintendent be raised from £372 (Grade 8H) by two annual increments of £15, and one for the balance, to £424 (Grade 7H).

In 1931, the N.A.L.G.O. requested that all draughtsmen (and not merely selected ones as hitherto) be placed on the grading scheme, and the Engineer and Manager agreed to recommend this to the Electricity Sub-Committee. The non-graded draughtsmen were accordingly placed in Grades 2 and 3 according to their capabilities and experience.

In 1937, on the retirement of the Chief Assistant Engineer, the post was abolished and the new position of Depute Engineer and Manager was created at a
salary scale of £700 to £1,000. The engineer appointed was placed on the scale at £800. A new post of Maintenance Engineer (Portobello) was established in 1938 at £424 (Grade 7H). In 1940, a new Depute Engineer and Manager was appointed when the post became vacant in November, and he was granted £700 rising by annual increments of £50 to the £1,000. He was, however, granted the double increment in 1941, bringing him to £800 in one year. It was pointed out that unless this increase were granted he would be earning less than the Power Station Superintendent at Portobello who was his immediate subordinate.

Technical conditions of supply created further salary problems in 1942. The export of power to the Grid had risen rapidly, and this involved considerable extra work for the Power Station Superintendent, the Assistant Power Station Superintendent, and the Maintenance Engineer. These three engineers were working day and night under extremely difficult conditions. Their salaries, however, were based upon the grade appropriate to the generation of power for local requirements, whereas generation for export to the Grid added another 33% to the total power generated. It was therefore decided to grant the Superintendent and his Assistant an increase of 5% on their salaries, and to raise the Maintenance Engineer from Grade 7 to 6 (an increase of £51 per annum). A new appointment was also created, that of Combustion Engineer at Grade 7. Edinburgh had now advanced from a class "H" to a class "J" station. In 1945, the designations of most Mains Department engineers were changed; a Distribution Engineer was appointed, and the Mains Superintendent became "Senior Assistant Distribution Engineer" (Grade 4J), assistant sub-station superintendents became "District Distribution Engineers" (rising from Grade 8J to Grade 7J). The Meter Superintendent became the "Commercial Engineer", rising from Grade 6J to Grade 5J (an increase of £67 per annum, spread over four years). Even the Clerk of Works became the Assistant Constructional Engineer (Grade 9J, £682 rising to £460 over four years).

The rising cost of living during the war period was covered by the National Joint Board's salary scale which was linked to the cost of living. This scale pro-vided/
provided very little satisfaction, however, to the technical engineering staffs. Of
their two main grievances, one was peculiar to the Electricity Supply Industry, and
the other was more general. The employers' section of the National Joint Board had
submitted a resolution on 10th December, 1940, to exclude the purchase tax component
in the Ministry of Labour cost-of-living index when calculating adjustments of
salaries. This resolution was accepted by the Board, but the engineers later
regretted their acquiescence. The journal of the E.P.E.A., the "Electrical Power
Engineer", in May, 1942, declared:

"What is probably galling many of the members is the fact that they appear to
be the only people who are subject to such a deduction. As far as we can ascertain,
there is no other industry in which employees are subject to a sliding scale of
remuneration where war taxation is excluded."

The resolution was rescinded later in 1942. The second objection of the
engineers continued to be put forward throughout the war. This was the simple point
that the official Ministry of Labour index did not reflect the real increase in the
cost of living. This index merely measured the average percentage changes in the
retail prices of a limited number of commodities which had been particularly popular
in 1914. What made the situation so picquant to electrical supply engineers was
that this antiquated index omitted electricity! The fact that gas, lamp oil and
candles were included in the index only made matters worse. The engineers agitated
for revision of the index on the lines of the White Paper on National Income and
Expenditure which took into account the rise in prices of a wider range of consumers'
goods. This index showed a rise in the cost of living (in 1945, for instance) of
54% on the 1938 level, whereas the Ministry of Labour Index showed a rise of only
28%. Salaries had risen (by 1943) to 12% above the 1938 level. This example shows
that the E.P.E.A. was justified in its view that the method of adjusting the
salaries of technical engineering staffs did not keep the level of real salaries in
line with changes in the cost of living, but this grievance was hardly confined to

1. Cmd. 6520
the Electrical Supply Industry.

With officials outwith the range of the N.J.B. schedule, war increases were fixed less rigidly. The Engineer and Manager of Edinburgh received a war bonus of £120 upon £500. In 1945, his basic salary maximum was raised to £1,870, and by the following year, when further controversy arose over his salary, he was earning a basic £1,750 plus his war bonus. The interests of some chief electricity officials were catered for by the National Joint Committee, represented on the employers' side by a National Joint Committee of Local Authorities and on the employees' side by the Associated Municipal Electrical Engineers. This Committee had been set up in 1941 but a District Committee had not been formed for Scotland. The opinion of the City Chamberlain of Edinburgh was that the Corporation was not therefore bound to adopt the salary scales of the National Joint Committee. In January, 1947, as a compromise, the Engineer and Manager was raised from £1,750 plus war bonus of £120 to his maximum salary (£1,870 plus bonus). This did not satisfy the A.M.E.E., and a special sub-committee was set up by the Public Utilities Committee "to report on the salary of the Engineer and Manager of Electricity Department". This sub-committee, established in March, 1947, had before it a letter from the A.M.E.E. pointing out that the Edinburgh Corporation was included in the National Joint Committee's list of undertakings which had refused or omitted to give information which was sufficiently precise to enable definite categorisation. The City Chamberlain reaffirmed his view that the agreement was not applicable to Edinburgh, but the sub-committee decided to circularise other Scottish undertakings. It was discovered that although no Scottish undertakings had been party to the original agreement in 1941, there were now thirteen undertakings which were paying to their chief electrical engineers salaries equal to or in excess of the salaries which would result from the adoption of the agreement. The sub-committee had not reached a decision by November, when the National Arbitration Tribunal urged local authorities who had not yet adopted the agreement with regard to their chief electrical engineers to take up membership of District Committees. This recommendation followed decisions in favour of the respective/
respective claims of the Chief Electrical Engineers of Sunderland, Heywood, Cardiff and Salford, and in January, 1948, the Edinburgh Electricity Sub-Committee resolved to apply the agreement to the Engineer and Manager.

In 1948, the National Joint Board reached a new agreement in respect of technical engineering staffs, awarding an increase of ten per cent on the first £300 of salary and five per cent on the remainder. The increases were scheduled to come into operation on 1st April, 1948.

Post-Nationalisation.

The 1948 agreement was adopted by the new National Joint Board as a temporary measure, although it was obvious that substantial amendment would be needed. This agreement was based upon the traditional structure of the industry, divided into undertakings of many sizes and under varying conditions of control. Nationalisation involved a considerable increase in the areas of operation, and the merging of undertakings in larger units would have meant - if the old arrangements had prevailed - disproportionate increases in the salaries of those engineers who found themselves in charge of vastly increased generation. The new National Joint Board, therefore, ruled that vesting-day mergers should not be taken into account in operating the 1948 agreement, but the classification according to kilowatts of plant installed would continue in effect in all other respects. Furthermore, the re-organisation of the industry (both from a technical and administrative viewpoint) would involve the creation of new grades, and it was the intention of the N.J.B. to bring under their aegis the staffs of the former Central Electricity Board.

An agreement was finally concluded on 17th February, 1950. The forty-four hour week was confirmed. The forty-four hours were to be calculated as an average over any period of six months commencing 1st July. Employees instructed to work hours in excess of this could claim, within three months of the expiration of the six monthly period in which they so worked, to be relieved from duty for a period equal to this overtime. For shifts in immediate succession there should always be five appropriate grade employees for each designated shift position, and these five would be responsible/
responsible for maintaining continuity, taking into account such factors as holidays, accidents, illness, discharges or resignations. This generous allotment avoided the strain formerly placed upon the engineering staffs when illness or other defections occurred. With regard to day employees, it was agreed that they should work such hours as were recognised as office hours by the Board (the term "Board" including the British Electricity Authority throughout this agreement), but when in direct charge of workmen they should work at such times as were necessary for effective supervision, provided that no permanent scheme of hours in excess of office hours was established. If an employee was instructed (in writing) to undertake standby duty outside his normal hours, in order to give advice or deal with breakdowns or emergencies necessitating prompt attention by being on call within reasonable distance of his residence, a retaining allowance at the rate of £2 (for each week of such standby duty) was to be paid. Arrangements should be made on an official basis in accordance with a pre-arranged rota.

For staffs at Authority Headquarters and in the Generating Divisions, the fixing of salaries in accordance with a classification based on the capacity of generating plant, and the grading of staff within each class according to their duties and responsibilities, were retained. As the capacity of generating plant in an Area was no longer necessarily related to the capacity of the distribution system, or to the responsibilities carried by the staff, a new basis of classification for distribution staff had to be found. In the case of Area Boards, therefore, classification was based on "units sold to consumers"; and within each class the staff were graded according to duties and responsibilities. There were two schedules of salaries; one (called "Schedule A") based on plant capacity for megawatts for power station staff, and on units sold in millions for Sub-Area and District Staff of Area Boards; the other (called "Schedule C") based on plant capacity in megawatts for staff at Authority and Generating Division Headquarters, and on units sold in millions at Area Boards Headquarters. Salaries ranged from £375 to £1,627 in the former schedule, and the lower and upper limits in the latter schedule were different for each/
each category - i.e. between £375 and £1,255 at B.E.A. Headquarters and £375 and £1,175 at Divisional and Area Headquarters.

At Edinburgh, the Power Station, Sub-Area and District staffs were accordingly placed under "Schedule A" as provided in the agreement. Engineers at Portobello power station came under Class "G" (100-150 megawatt capacity involving salary ranges from £433 to £1,119 (with variations for length of service as well as according to responsibility). This meant increases of approximately £50 per annum for lower grades (station and boilerhouse engineers, maintenance engineers, boilerhouse and turbine-house superintendents) and increases of approximately £60 per annum for higher grades (deputy power station superintendents). The Power Station Superintendent (Grade 1) received a new maximum (after four years' service) of £1,119 (an increase of £74 per annum). Sub-Area and District staffs of equivalent grades received comparable increases.

In May, 1951, the Electrical Power Engineers' Association asked for an increase of 15% in all salaries, with the proviso that no personal allowances or other excess payments should be reduced as a result. The claim was based on the increased cost of living, the need to maintain reasonable salary differentials as incentives to promotion and to establish an equitable relationship between the salary level of technical and clerical staffs, and on the increased responsibilities arising from the growing complexity of engineering practice. The Electricity Board accepted only the first basis, and agreement was eventually reached on increases of 10% on the first £450 of salary, 4% on the next £550, and 2% on the remainder, with effect from 1st July, 1951. Whilst the proviso relating to personal allowances or other excess payments was not accepted, it was agreed that individual cases should be decided locally on their merits. A further claim for a general 10%, subject to the same proviso and based on the further increase in the cost of living, was made by the E.P.F.A. on 18th March, 1952. By the end of 1952, the implementation of the national salary agreement was virtually completed. Engineering draughtsmen were placed in a new Schedule D, unrelated to the normal classification provisions. Chemists, instrument...
instrument engineers, combustion and efficiency engineers and technical records engineers were brought with the normal classification and grading provisions. Schemes of car and motor-cycle allowances were brought into operation, and agreement was concluded on travelling expenses, removal expenses, subsistence and lodging allowances, and expenses of candidate for appointment.

Comparison of post-nationalisation salaries with those prevailing previously becomes impossible at the Divisional and Area Headquarters level. A new hierarchy has been created with administrative and planning duties of a different nature and scope.

Fixed holidays were laid down for employees with less than six months of service (two weeks holiday between 1st April and 30th September less any period of paid annual holiday since 1st April in his previous employment); with six months of service and over (two weeks annual holiday); those with twelve calendar months and over received holidays according to age and salary. Thus, those under 21 years of age received two weeks, plus one working day for each year of service after the first year to a maximum of three weeks. Employees of 21 years and over received three weeks plus additional days based on the following salary scales: under £499 per annum, plus one working day for each year of service after the first year to a maximum of three working days; with salary exceeding £499 but not exceeding £749, plus one working day for each year of service after the first year to a maximum of four weeks; with salary exceeding £749, a fixed total annual holiday entitlement of four weeks.

These holidays were exclusive of public holidays. Employees were entitled during the holiday year (i.e. 1st April to 31st October) to nine days holiday with pay on public and other holidays. Saturday was to count as half a day in the calculation of additional holidays. In the event of the death of an employee, his "personal representative" was entitled to remuneration in respect of holidays which had not been taken.
Administrative and Clerical Staffs.

Pay and conditions of work for administrative and clerical staffs were, from the beginning of the Undertaking, closely in line with other Corporation departments, and regular scales were brought into operation for permanent employees. Thus, in February, 1913, scales were established for First Class Clerks (£150 to £200 per annum) and for Second Class Clerks (£110 to £140). Chief Meter Clerks received £1:14:6d weekly, rising to £2:2:0d, and Meter Clerks received £1:7:0d rising to £1:18:0d. In 1915, an additional ungraded clerk was engaged at a salary of £1:1:0d weekly, rising to £1:12:0d "by such increments as may be recommended by the Resident Electrical Engineer". Hours worked were 51 weekly, and no overtime was paid, in spite of several petitions by the clerks, until June, 1915, when previous Committee decisions to the contrary were rescinded. Although clerks were not covered by Committee on Production awards, in respect of war advances, the Electricity Committee tried to relate the bonuses as fairly as possible to such awards, and most salaried staff under 200 were granted a 1½% war increase on earnings, whilst those above (up to 350) received 1%. In addition, slight increases were made to basic salaries during the war period. Temporary clerks received an additional 2/- weekly; the maximum salaries of the newly designated "Clerical Assistant to the Engineer" and the Second Class Clerks were raised in January, 1918, from £250 and £140 respectively to £250 and £170. Senior Typists (earning £1:7:6d in 1915) and Junior Typists (earning £1:5:0d) received increases to £1:10:0d and £1:7:6d. In 1919, the Meter Clerks were awarded a 4/- increase, making £2:2:0d weekly basic salary. In November, 1919, the Clerical Assistant to the Engineer resigned, and the Committee decided to redesignate the post "Secretary", with a scale of £250 rising to £350 plus war bonus (hitherto the maximum had been £250 plus a war bonus of £64). The Salaries and Wages Committee approved the new salary but rejected the new designation, and declared the position to be that of "chief clerk". In May, 1920, new scales were drawn up for clerical assistants. A grade called "Staff Assistants" was to receive £310 to £350; First Class Clerks were to be further sub-divided into Grades/
Grades I (£260 to £500), II (£220 to £250), III (£180 to £210); Second Class Clerks were to receive £145 to £175; and Third Class Clerks, £100 to £140. Fourth and Apprentice Classes received £55 to £95 and £15 to £40. Typists were also divided into First Class (£105 to £120), Second Class (£75 to £100) and Third Class (£40 to £70). In 1924, a Principal Clerical Assistant was appointed, and by 1930 he had reached a maximum of £525. It was increased in this year to £600 (by three annual increments of £20 and one of £15). The Engineer and Manager had suggested three annual increments of £25, but this was amended by the Committee.

Recruitment for the office staff, in addition to the usual channels from school (ascending through the four grades), took place from assistant storekeepers who succeeded in passing a junior commercial examination, and from temporary clerks. The assistant storeman (earning £3 weekly in 1930, and £3:5;0d by 1937) who passed his examination in 1937 was placed in the nearest appropriate clerical (grade three) class at £180 per annum. A clerk who was earning £110 in 1939 (scheduled to rise in 1940 to £120 as a Third Class Clerk) was given an increase to £130 on passing the final examination of the Chartered Institute of Secretaries. In 1940, the salary of the Principal Clerical Officer was increased by two annual increments to £650.

Post-Nationalisation.

The first act of the new N.J.C. for Administrative and Clerical Grades, established on 31st March, 1948, was to draw up an interim clerical salary scale, retrospective to vesting day and similar to the scale in operation for local authorities previously. The main benefit was derived by staffs not formerly under municipal control. Clerical and administrative workers at undertakings like Edinburgh found almost no difference in salaries and conditions. This interim scale provided for salaries ranging from £125 at 16 years of age to £385 at 32 in the case of men, and from £108 to £208 in the case of women. Hours were standardised at 38 per week from 1st August, 1948, except for staff working other hours as a specific condition of employment. One new provision, as far as Edinburgh was concerned, was that overtime rates were established at single time for the first ten hours in any week.
week, and \( \frac{1}{4} \) time thereafter. No payment was made for overtime of less than one hour in a day. A temporary scale was also established for administrative staffs (interpretation being left to the Electricity Boards as to degree of "administrative responsibility") providing for five grades with salary ranges from \( £270-£450 \) to \( £600-£760 \). The grades were related to duties and responsibilities, but no provision was made for overtime payment. Another temporary scale was adopted for shorthand and typing grades. Shorthand typists received salaries ranging from \( £135 \) at 16 years of age to \( £321 \) at 32. Typists' salaries ranged from \( £109 \) to \( £308 \) for these ages. Private secretaries also received new salary ranges, being placed within two grades of \( £270-£450 \) and \( £350-£550 \) respectively. In January, 1949, the clerical staff's 38 hour week was extended to the other grades, and holiday agreements were established on the same lines as those covering the technical engineering staffs. These benefits, however, were already enjoyed by Edinburgh employees.

On 1st April, 1950, a new scheme came into operation. Nine entirely new salary scales between \( £310 \) and \( £1,020 \) were instituted, extending up to the limits of the managerial grade covered in the separate machinery for executives. All posts within the Area and Divisional managements were graded according to responsibilities entailed, and individual gradings were left to the Boards and their staffs (the staff enjoying right of appeal through its negotiating machinery). New scales for general clerical staffs were agreed upon. Men received \( £135 \) to \( £385 \) and women \( £108 \) to \( £308 \). Increments based upon age were automatic up to 26. Shorthand typists now received \( £135 \) to \( £335 \) and typists \( £114 \) to \( £309 \), while private secretaries were granted ranges of \( £310-£390 \) and \( £390-£450 \). No change was made in the 38 hour week or in overtime payment (the administrative staffs still being denied such payment).

In July, 1950, a scale was established for telephone operators (men and women) ranging from \( £108 \) at 16 years of age to \( £308 \). New provisions were also made to grant maternity leave to women employees, to establish a regular car allowance and recognised allowances in respect of travelling, removal, and subsistence and lodging.

In March, 1951, the trade unions lodged a claim for a 20% increase in all salaries.
The N.J.C. agreed on a variety of increases from 1st June, 1951, for staff outside grades 1-9. The effect of the general clerical scale was to raise it to £150 at 16 to £230 at the maximum for men, and to £120 at 16 to £244 at the maximum for women, the London additions being unchanged. No agreement was reached, however, on amounts for the numbered grades, and the N.J.C. referred the question to the Industrial Court, who awarded an increase of £50 for all employees in grades 1-9, from 1st June, 1951. As from the same date, £10 was added to the maximum of grade 1 to remove an anomaly; whilst revised rates for women tracers, ranging from £150 at 16 to £255 at 26, came into force on 1st January, 1952. A further general claim by the trade unions, for a 10% increase from 1st March, 1952, together with proposals for a review of the national salary agreement, was rejected by the Employers, and the matter was referred to the Industrial Court. On 6th October, 1952, the Court awarded increases in the general clerical grade, ranging from £10 to £20. Salaries which formerly ranged from £150 at 16 rising to £255 at 26 and then by stages to £250 were henceforth to be £260 at 16, rising to £275 at 26 and then by stages to £250. Salaries of the higher clerical administrative and commercial staff (ranging from £360 to £1,070) were increased by £20 a year under the Industrial Court's 1952 Award.
CHAPTER IV.

Negotiations and Negotiating Machinery

Manual Workers

One year after the opening of the Dewar Place Electric Station the Incorporated Municipal Electrical Association held its first annual convention (1896) which was attended by delegates from local authority electricity undertakings. It would be misleading to emphasise the role of the I.M.E.A. at this early stage of its existence, in negotiations and negotiating machinery, but there seems to have been close consultation between the Edinburgh Undertaking and the I.M.E.A. upon practice in other undertakings, although correspondence never involved more than a request for information. It was not until the Great War that the I.W.E.A. stepped boldly into the arena of negotiations, but by this time a close trust and liaison existed between the Association and the Edinburgh Undertaking, and it came to speak upon behalf of undertakings like Edinburgh with an ease and authority which was not common among employers' associations in other industries. The frequent meetings (both official and unofficial) of chief engineers and councillors from various municipalities led to discussions upon the topic of wages and conditions. The importance of this incipient collaboration among employing authorities should, however, be exaggerated; prior to 1914 collective agreements between electricity supply undertakings as a whole and individual trade unions or groups of trade unions were unknown.

Applications from the Edinburgh branches of the various trade unions would be submitted to the Electric Lighting Committee, through the Resident Electrical Engineer. The N.U.C.W. represented the unskilled workers, and the E.T.U. appeared during the Great War to advance the claims of certain skilled electrical workers, like cable jointers. The normal practice was to call deputations before the Committee. In 1920 the name of the Committee was changed to the "Electricity Committee" and a "Staff and Works Sub-Committee" was set up in December of that year. The task of receiving delegations was referred to this sub-committee, but by this time the main/
main work of negotiation was already beginning to fall within the scope of higher bodies.

Over some disputes the Resident Electrical Engineer would communicate with other undertakings or with the I.M.E.A., requesting details of their procedure, but this did not always yield any conclusive findings, and the Edinburgh Undertaking was thrown back upon its own discretion. In 1915 the Edinburgh secretary of the Operative Bricklayers' Society, for instance, complained that handymen were being used instead of bricklayers for repairs to the firebrick of boilers. The Resident Electrical Engineer reported that "seven electrical undertakings employ handymen or labourers, two employ masons, eleven employ bricklayers (in some cases their own men constantly employed, in others by contract) and four employ bricklayers or handymen according to the nature of the work". The attitude of the Resident Electrical Engineer was practical. "There seems no hard and fast rule," he informed the Committee. "It is certainly not worth while having a lot of friction with the bricklayers' union, and if it were not for the long service of the two handymen, there would not be any difficulty." The basis of the complaint was that a certain Thomas Strachan (who happened to be local secretary of the Operative Builders' Society) had been dismissed from his work at the McDonald Road station to reduce working expenses. The management denied this; it was alleged that Strachan had been employed merely on a temporary basis during the illness of a handyman. "Strachan did not object to working with handymen until he was dismissed," the Resident Electrical Engineer told the Committee, "although as local secretary to the Operative Bricklayers' Society I suppose he should have objected from the first!" The Committee decided to compromise; it refused to reinstate the bricklayer at McDonald Road, but promised to employ bricklayers at Dewar Place thereafter. This decision led to petitions and correspondence lasting for over a year, until in July, 1916, the Committee reasserted its refusal in unequivocal terms. It was four years before the bricklayers returned to the offensive, and in October, 1920, they forced the Committee to capitulate. They announced that, unless bricklayers were employed at McDonald Road and Dewar Place/
place, no bricklayers would be supplied for work at the new Portobello Station.

In 1919, the United Operative Masons' Association attempted to secure the payment of extra "danger" money for work on chimneys by citing an agreement it had contracted with the Building Trades' Association and the Masons' Association. The Resident Electrical Engineer communicated with the Building Trades' Association which confirmed that there was such an agreement in force, and the claim of the union was valid under Rule 13. The claim was accordingly met, although the Committee stressed that they were under no obligation to meet claims in respect of agreements to which they were not signatories. In 1920, however, the Magistrates and Council, upon the recommendation of the Electricity Committee, became an Associate member of the Edinburgh, Leith and District Building Trades' Association upon payment of one guinea.

This agreement also covered the Amalgamated Union of Building Trade Workers, and this union requested the Electricity Committee in August, 1923, to put into operation certain extra payments for special work, and to pay travelling allowances. Their request was refused, and the Town Clerk was instructed to write to the Edinburgh, Leith and District Building Trades' Association, protesting against "the arbitrary introduction into their rules of special provisions affecting local authorities, without consultation with the latter".

The building workers had their own national and district negotiating machinery. Their National Joint Council was appointed in 1920 (membership being divided between the National Federation of Building Trades' Employers, comprising many local associations, and a National Federation of Building Trades' Operatives, including both craft and general unions), and the scope of the negotiating machinery was extended under arrangements made in 1926 and 1932. Although the Electricity undertaking generally accepted rates and conditions negotiated by the building workers through their own machinery, problems of interpretation continued to arise which could only be solved at a purely local level. There was considerable controversy, for instance, in March, 1931, between the Engineer and Manager and the bricklayers employed by the Edinburgh/
Edinburgh Undertaking. They claimed extra rates for certain kinds of work, while the Engineer and Manager rejected the right to refuse overtime which had been claimed by the secretary of their union. The secretary refused to allow any member of his union to work overtime without a permit from himself. A compromise was reached, and the bricklayers gained certain extra payments in return for abandoning their overtime rules. Throughout this interwar period, the building workers and other outside craftsmen lacked the advantages enjoyed by workers covered by the Electricity Supply Industry machinery.

The war of 1914–1918 had given impetus to national agreements and awards for the Electricity Supply Industry, and it was inevitable that the unions should wish to create more permanent machinery for the post-war period. The aspirations of the unions were largely met by the recommendations of the Whitley Committee on Relations between Employers and Employed,¹ and most municipal employers were no less favourably impressed by the reports. The Edinburgh Undertaking, for instance, had been attempting for some years to relate its awards to those of other municipal undertakings, and to concede pay and conditions to tradesmen comparable (with certain qualifications) to those enjoyed by tradesmen under national agreements with private employers. The Electricity Committee had usually been willing to discuss matters with the workers to avoid friction. The Whitley Reports² seemed to offer a solution to both problems; to co-ordinate pay and conditions to a greater extent than/

¹ The Committee consisted of Mr. J. H. Whitley (then Chairman of the Committee of the House of Commons and later its Speaker); F. S. Burton (Amalgamated Society of Engineers); G. J. Carter (Shipbuilding Employers' Federation); S. J. Chapman (Professor of Political Economy, University of Manchester); G. Claughton (Chairman, London and Western Railway Company); J. R. Clynes (President, National Union of General Workers); J. A. Hobson (Professor of Economics, London School of Economics); Susan Lawrence (Women's Trade Union League); J. J. Mallon (Secretary, National Anti-Sweating League); T. R. Ratcliffe-Ellis (Secretary, Mining Association of Great Britain); R. Smillie (President, Miners' Federation); A. Smith (Chairman, Engineering Employers' Federation); Mona Wilson (National Health Insurance Commissioner).
² Cmd. 8606 of 1917; Cmd. 9001 of 1918; Cmd. 9002 of 1918; Cmd. 9099 of 1918; and Cmd. 9153 of 1918.
than heretofore, and to alleviate friction with the workers by including them in regular negotiating machinery. Edinburgh was no exception to the general climate of opinion among municipalities which was favourable to Whitleyism, but the immediate stimulus for the formation of a National Joint Industrial Council for the Electricity Supply Industry came in November, 1918. In that month, the Committee on Production issued an award\textsuperscript{1} which conceded the claim of employees of the L.C.C. and other London undertakers for increases to meet the rising cost of living, and the establishment of a programme of scheduled rates and conditions of service. The award involved the establishment of some kind of joint negotiating machinery and unofficial talks began between prominent employers and trade unionists. The Edinburgh Undertaking was asked officially (after various unofficial discussions) in April, 1919, to become a party to a N.J.I.C. under the auspices of the Ministry of Labour, and they were required to grant plenary powers to representatives acting on the Council. This invitation (which came from the I.M.E.A.) to join the proposed N.J.I.C. was accepted, and the Magistrates and Council confirmed the Committee's decision. In November, 1919, Edinburgh Corporation was represented at a conference held in Edinburgh to form a Scottish District Council of the N.J.I.C., and in January, 1920, the Electricity Committee appointed its first delegate to the Scottish District Council.

The N.J.I.C. consisted of 39 members of which 27 represented companies and municipalities and 12 trade unions. Employers' representatives were the Incorporated Association of Electric Power Companies, Conference of Chief Officials of the London Electricity Supply Companies, Provincial Electric Supply Association of the United Kingdom, and Local Authority representatives from the Employers' sides of the various district councils. The trade unions represented on the council were the A.E.U., E.T.U., National Union of Enginemen, Firemen, Mechanics, Motormen and Electrical Workers (Section of the T. & G.W.U.), N.U.G.M.W., and the T. & G.W.U.

The objects of the N.J.I.C. were to discuss hours of labour, wages, holidays, sick/

\textsuperscript{1} Award No. 2772.
sick allowance, and general conditions of employment. The country was divided in thirteen districts, from which the employers' representatives on the N.J.I.C. were elected annually. Members of the district councils were themselves elected annually, and their number always included several engineer members who were thus able to contribute those technical details of the working of the undertakings which affected industrial relations. District matters with national repercussions had to be referred to the N.J.I.C., and all district minutes had to be ratified nationally. Meetings of employers to elect their representatives to the N.J.I.C. were usually held in one of the large towns in the area; in the case of the Scottish District the choice was either Edinburgh or Glasgow. As undertakings in most of the districts varied in size and general conditions affecting the employment of labour, they were sub-divided into zones as "A" (including stations situate in large cities and their environment), "B" (large towns) and "C" (those situate in rural areas). Voting at all meetings was taken separately for both sides, and before a resolution could be carried it required a majority from both sides. The Chairman possessed a vote, but no casting vote. There were two Joint Secretaries (one from each side) and expenses of both National and District councils were borne equally by employers and employees.

During 1920-1921, all the District Councils agreed upon basic rates of wages and working conditions, and variations in these rates and conditions were negotiated thereafter at district level. The National Council, however, determined the general movements in relation to bonus, cost-of-living adjustments and other additions which from 1914 onwards had been superimposed on the basic rates. Cost-of-living variations operated until 1928. There was a move to withdraw from the District Council in March, 1927, but this was defeated by 10 votes to 2 at a meeting of the Electricity Committee on 29th March. In the following May, an Edinburgh councillor was, in fact, appointed Chairman of the S.D.J.I.C.

The National and District Councils catered for a wide variety of interests, both from the employers' and employees' side. There was some controversy, however, in the Scottish District over the right to represent the less skilled manual workers.
The N.U.C.W. had been strong in Scotland, and particularly in the Edinburgh electricity undertaking, but it was excluded from the National and District Councils. In 1928, the Scottish Secretary of the N.U.C.W. appealed direct to the General Council of the T.U.C., and his claim to join the negotiating bodies for the Electricity Supply Industry was supported. The employers' side of the Councils also supported the N.U.C.W., but the trade union side opposed their entry. This was because the N.U.G.M.W. feared that its authority would be weakened among general workers, and it gained the support of the other unions in keeping out the N.U.C.W. The controversy continued after the N.U.C.W. became the N.U.P.E. in 1932. In Edinburgh, in spite of intensive pressure from the N.U.G.M.W. which attempted to seize control of unskilled workers, the N.U.P.E. held its ground with more success than elsewhere. This was due largely to the efforts of one man, J. M. Airlie, who, in addition to being Scottish Secretary of the N.U.P.E., was a member of the Edinburgh Town Council and served on the Electricity Committee. Mr. Airlie's personal influence kept the unskilled workers in the N.U.P.E.; he was able to move among them, discuss their problems, and raise their grievances in the Town Council. But his efforts to secure a place on the District Council were blocked by the pro-N.U.G.M.W. trade unions. On 10th April, 1937, the Edinburgh Electricity Sub-Committee agreed to support a fresh application by the N.U.P.E. for affiliation to the District Council. On 8th July, however, the Sub-Committee was informed by the Scottish District Council that the trade union side had "unanimously agreed not to accede to the request for representation by the N.U.P.E." The N.U.P.E. was still not daunted. In January, 1938, it requested the Public Utilities Committee to receive a deputation. By this time, however, the Town Council had recognised that implacable opposition was excluding the N.U.P.E. from the negotiating machinery, and that there was nothing further that could be done in face of this opposition. The fight was to be renewed when the Nationalisation Act recreated the industry's negotiating machinery.
Technical Engineering Staff.

The technical engineering staff at the Edinburgh Undertaking was content, until the 1914-1918 war, to accept the salary scales laid down by the Electric Lighting Committee. The recommendations of the Resident Electrical Engineer were usually accepted by the Committee, and were not challenged by the engineering staff. There was no case of any engineer appealing over the head of the Resident Electrical Engineer. The situation was altered during the war when agreements reached at a national level were applied to the Edinburgh Undertaking, although these agreements did not affect basic salaries. Then, on 18th February, 1919, came the famous Stoker Award. This granted substantial increases to all grades up to and including Deputy Chief Engineer, and recommended that the electricity undertakers and the Electrical Power Engineers' Association should meet to decide upon agreed schedules of salaries. Discussion was already taking place among employers and unions upon the Whitley Reports, and the Whitley recommendations had considerable influence in giving practical shape to the somewhat ambiguous recommendations of Award No. 9261 upon the subject of negotiating machinery. A National Joint Board was appointed in 1920 to deal with the salaries and conditions of service of the technical staffs, and district councils were set up. There was a national agreement from the outset, and the District Boards (unlike the Districts Joint Industrial Councils which we have already examined) were concerned with local application and not with the determination of basic salaries.

The National Joint Board consisted of twelve Employers' representatives (five from the I.M.E.A., two from the Incorporated Association of Electric Power Companies, two from the Conference of the Chief Officials of the London Electricity Supply Companies, and two from the Provincial Electric Supply Company of the United Kingdom). There were twelve Employees' representatives, all from the E.P.E.A. Membership was later increased to a total of 52 (26 from each side).

Representatives of employers were usually not the same representatives as those on Award No. 9261.
on the N.J.I.C. Municipal councillors were glad to have generous assistance from engineers as co-representatives upon the N.J.I.C. and District Councils, but in the case of the Joint Boards they were reluctant to entrust the fixing of salaries even to quite senior chief engineers. This trend indicated a change of attitude from the early days of municipal undertakings like Edinburgh which left the burden of negotiation and fixing of salaries upon the shoulders of the chief official. The appointment of the employers' representatives to the Joint Board was made in the same manner as in the case of the District Council. Undertakings of less than 1,000 kw. capacity were not represented and their staffs were not scheduled by the Joint Board. The efforts of the E.P.E.A. to have these staffs included in the schedules were resisted by the employers, who claimed that it would be impossible to do this owing to the diversity of duties which have to be performed by the staffs of small undertakings. The municipal undertakings were neutral in these discussions, but they abode by the majority decisions of the employers' side of the Board.

The constitution of the National Joint Board was approved by the Edinburgh Electricity Committee in July, 1920, and the scale of salaries adopted. It left the question of conditions of service to be determined by the Scottish District Joint Board, whose decision it agreed in advance to accept. There was some delay, however, in the formation of a District Board, although Edinburgh strongly favoured the immediate setting up of such a Board on lines laid down by the N.J.B. The E.P.E.A. grew impatient with the attitude of Scottish employers and on 12th November threatened to withdraw their members if a decision were not reached. A meeting of employers was hastily summoned, and it took place in the City Chambers, Edinburgh, on 29th November, 1920. It resolved to set up a District Board for Scotland, consisting of 24 members (12 from the employers, and 12 from the E.P.E.A.). This promise, however, did not completely satisfy the E.P.E.A. who wanted the immediate granting of their demands throughout Scotland, both in respect of salaries and conditions. Here again, Edinburgh was favourably disposed to these claims, but was anxious not to get out of step with other Scottish electricity undertakings. On 10th/
10th December, 1920, there was an emergency meeting of the Electricity Committee to consider the "crisis in electricity supply". There was little to be done, however, at this stage, except to support an immediate meeting between employers and E.P.E.A. representatives. Arrangements for this conference were made by the Interim Secretary of the Scottish District Joint Industrial Council. On 4th January it was announced that employers' representatives and E.P.E.A. officials had decided not to proceed with the formation of a District Board on the original lines, but to form an Interim Joint Committee to deal with any emergency which might arise in regard to the adoption of N.J.B. schedules by Scottish undertakings. This joint committee was to consist of six representatives from each side.

Although Edinburgh had adopted the national schedule with good grace at the beginning, problems of interpretation began to fray the tempers of the management and committee, and on 27th June, 1922, the Electricity Committee recommended withdrawal from the N.J.B., "leaving the Corporation free to appoint technical engineers on such terms as they may consider fair and reasonable". The Magistrates and Council recommitted the matter, and a compromise solution was reached. The Corporation was to withdraw from the N.J.B. (this took place in July, 1922) but the Committee was to recognise that obligations entered into with the technical staff should be fulfilled. In fact, N.J.B. schedules were continued uninterrupted, and the resignation from the N.J.B. seemed to be little more than a formal gesture. Although the Engineer and Manager was instructed to "treat each person on the technical staff on his merits...and to report to the Committee as to the increase in salaries, or otherwise, to be adopted," he was compelled to fall back very largely, even for new appointments, upon the schedules. "I can only form an opinion of what are the suitable salaries to be paid for the various duties performed," he informed the Committee in January, 1924, "from the salaries paid in other electrical undertakings of similar size." This, in practice, meant N.J.B. scales. The Committee recognised the absurdity of the position, and in March, 1924, it decided to rejoin the N.J.B. It remained a member thereafter. Shortly after Edinburgh had attached itself again to the national negotiating machinery, a properly constituted Scottish District Joint Board was formally established.
Higher Executive Staffs.  

Negotiating machinery for the chief electrical engineers of local authorities was discussed at a surprisingly early date in the history of the industry. The matter was raised in a meeting of the I.M.E.A. (at which Edinburgh was represented) in 1919. The I.M.E.A. Council, in November, 1919, issued a suggested scale of remuneration, rising to 60 million units sold (undertakings selling more than this were excluded from categorisation). A clause had been proposed by the A.M.E.E. (representing chief engineers) limiting the duties that could be placed on the shoulders of an official by his local authority, but that the I.M.E.A. felt that it was a matter for individual agreement between the official and authority concerned whether, for instance, he should undertake such additional tasks as Tramway Manager.

A National Joint Committee was set up with representatives from the I.M.E.A. (employers) and the A.M.E.E. (employees). Although all undertakings were recommended to join, the response was poor, particularly in Scotland. In view of the small numbers involved, district committees were not formed. Although Edinburgh Corporation continued to request information upon the salaries of chief officials of other municipalities as a guide to its own policy, it refused to acknowledge any formal negotiating machinery. It was not until April, 1938, that action was taken by Scottish employers. A conference, called by the Employers' Honorary Secretary, Scottish District Joint Board, was held in Glasgow on 25th April to "consider the advisability of setting up in Scotland some form of conciliation board to determine and regulate the salaries and conditions of service of Chief Electrical Engineers in the service of local authorities". Nothing came of these talks, and another conference was held in the City Chambers, Edinburgh, in November, 1940. When the delegate from Edinburgh reported back to the Public Utilities Committee, however, the recommendation to join a Scottish District Committee was rejected. The Electricity Sub-Committee took a different view, and recommended affiliation; the Treasurers' Committee/  

1. This designation was not, in fact, used until after nationalisation, but in order to preserve continuity I have adopted it to describe chief electrical engineers in the pre-nationalisation era.
Committee recommitted the matter; the Electricity Sub-Committee refused to change its mind, and on 19th December, 1941, the Public Utilities Committee finally decided to approve joining the proposed District Committee. These various Corporation committees had, as it turned out, merely been wasting their breath. By the time they had arrived at a decision, negotiations at a district level had broken down. A further conference of local authorities was held on 5th July, 1943, and it was resolved that Scottish undertakings should not form a District Committee. The whole question was left in abeyance by Edinburgh until 1947 when the A.M.E.E. drew attention to the inadequacy of the Engineer and Manager's salary. In January, 1948, the Edinburgh Undertaking accepted the national negotiating machinery for Chief Electrical Engineers. It was a deathbed repentance. Three months later the Undertaking was nationalised.

Administrative/
Administrative and Clerical Staffs.

For most administrative and clerical grades there was no negotiating machinery within the framework of the Electricity Supply Industry, but they were covered by the National Joint Industrial Council for Local Authorities (Scotland) Administrative, Professional and Clerical Services, and their interests were represented by N.A.L.G.O. There was some overlapping of machinery. Certain drawing office staffs at Edinburgh, for instance, were put under local authority negotiating machinery in 1930, after N.A.L.G.O. had raised the matter with the Electricity Sub-Committee. It was not until 1947 that the question was raised whether these employees would not be more appropriate under Joint Board machinery, in view of the technical nature of their work and its particular relevance to the Electricity Supply Industry. These employees were transferred to the N.J.B. in January, 1948, on the recommendation of the Engineer and Manager.

Post-Nationalisation.

Section 531 of the Electricity Act (1947) laid upon the Authority the duty to "seek consultation with any organisation appearing to them to be appropriate with a view to the conclusion between the Authority and that organisation of such agreements as appear to the parties to be desirable with respect to the establishment and maintenance of machinery for -

(a) the settlement by negotiation of terms and conditions of employment of persons employed by the Electricity Boards, with provision for reference to arbitration in default of such settlements in such cases as may be determined by or under the agreements

(b) the promotion and encouragement of measures affecting the safety, health and welfare of persons employed by Electricity Boards and the discussion of other matters of mutual interest to the Boards and such persons, including efficiency in the operation of the services of the Boards."

1. It was under Section 53 (1) (a) that the negotiating machinery of the industry was revised.
Manual Workers (including Foremen and Chargehands).\(^1\)

A new N.J.I.C. was set up on 31st March, 1948, as a result of an agreement between representatives of the Central Authority (including each generation Division), each Area Board, and the North of Scotland Hydro-Electric Board, and representatives of selected unions. These were the A.E.U., E.T.U., National Union of Enginemen, Firemen, Mechanics and Electrical Workers, N.U.G.M.W. and the T. & G.W.U. The N.J.I.C. was to consist of 45 members (33 from the Boards and 12 from the unions). Representation was distributed in the following fashion:—

Central Authority (3); one from each generation and transmission division, nominated by the Central Authority (14); one from each Area Board (14); North of Scotland Board (2); A.E.U. (2); E.T.U. (3); N.U.E.F.M.E.W. (1); N.U.G.M.W. (4); T. & G.W.U. (2).

No resolution could be adopted by the National Council or by a Committee of the Council unless a majority of the Electricity Boards' members, and also a majority of the Unions' members, present at the meeting, had separately voted for it. The National Council was to elect a Chairman and Vice-Chairman annually; when the Chairman was an Electricity Board member the Vice-Chairman was to be a union member and vice versa. These roles were to alternate. Joint secretaries were to be appointed, and administrative expenses were shared equally.

The duties of the National Council were listed as follows:—

To settle by negotiation the terms and conditions of employment of manual workers engaged in the Electricity Supply Industry and for that purpose:

(1) To secure the greatest possible measure of joint action between the Electricity Boards and the Unions.

(2) To consider, approve or refer back the minutes of or the reports and recommendations made by District Councils concerning the terms and conditions of employment of manual workers engaged in the industry and to determine any matter upon which a District Council has failed to agree and which has been referred to the National Council.

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\(^1\) The inclusion of Foremen and Chargehands in the same negotiating machinery as the men has had unfortunate repercussions at the Undertaking level. See page 535.
Council by the District Council.

(3) To consider measures for securing the inclusion of the manual workers in their appropriate Trade Unions.

(4) To collect statistics and information on matters concerning the terms and conditions of employment of the manual workers engaged in the industry or any other industry.

(5) To enquire into special problems in relation to the terms and conditions of employment and organisation of the manual workers in the industry in Great Britain and in other countries and where the National Council deem it desirable to publish reports thereon.

(6) To make representations to the Government or to Government departments or other authorities concerning the terms and conditions of employment in the industry.

(7) To consider any matters in relation to terms and conditions of employment that may from time to time be referred to the National Council by the Government or any Government department.

Clause 20 of the constitution was an entirely new provision. It stated:—

"In case the National Council are unable to determine any matter falling within the scope of their functions they shall at the request of a majority of either the Electricity Boards' members or the Unions' members refer the difference to the Industrial Court or to any other agreed Tribunal for arbitration and any award made in relation to the difference shall be binding upon the Electricity Boards and the Unions and the members of the Unions." Although arbitration had been accepted in practice by the N.J.I.C. for many years, as we have seen, this was the first time that constitutional provision had been made. The setting up of the National Arbitration Tribunal under Order 1305 had extended legal sanction to arbitration awards, and also laid on the Ministry of Labour the duty to refer any dispute to the appropriate negotiating machinery (where it existed). The award of that negotiating machinery was legally binding upon both parties. This was the position before vesting day in the electricity supply industry, and the compulsory power of enforce-
ment of agreements made by the N.J.I.C. (and the N.J.B.) rested upon the provisions of Order 1505. Under Clause 20 it was no longer necessary to invoke Order 1505, and the arbitration procedure existed independently of that Order.

District Joint Industrial Councils were set up to coincide with the sphere of operations of each area board, consisting of 22 members. Of the ten Electricity Boards' members, three were appointed by the Division and seven from the Area Board (of whom not less than three were to be members of the Board). The Unions' distribution was as follows:—A.E.U. (2); E.T.U. (5); N.Y.E.F.M.E.W. (1); N.U.G.M.W. (4) and T. & G.W.U. (2).

The functions of the District Council were defined as follows:—

(1) To secure the greatest possible measure of joint action between the Electricity Boards and the Unions in order to ensure that the terms and conditions of employment settled from time to time by negotiation or arbitration through the machinery of the National Council are observed in the area by the Electricity Boards, the Unions and the members of the Unions.

(2) To make recommendations to the National Council concerning the terms and conditions of employment of the manual workers employed in the industry in the area.

(3) To collect information and statistics on matters relating to the terms and conditions of employment in the area of the manual workers in the industry or in any other industry.

(4) To consider any matters in relation to terms and conditions of employment that may from time to time be referred to the District Council by the National Council.

(5) To enquire into any difference that may arise or be apprehended between the Electricity Boards and the Unions or any of them concerning terms and conditions of employment of the manual workers in the area and in connection therewith:

a. To investigate the full facts as affecting all the parties between whom the difference has arisen in order to arrive at an agreed decision for the settlement of such difference.

b. To make and communicate to the parties the recommendations of the District Council thereon.
c. To use all available means for settling the difference.
d. To refer the difference to the National Council at the request of a majority of either the Electricity Boards' members or the Unions' members in case the District Council are unable to settle it.

Provided that any recommendation made under the provisions of this Clause shall be in conformity with the terms and conditions of employment settled from time to time by negotiation or arbitration through the machinery of the National Council and it shall be competent for the National Council to veto any recommendation which is not in such conformity.

(6) To define the areas or spheres of operations of Works Committees to be established in the area so as to secure:

a. convenience of administration and
b. adequate representation of the Electricity Boards and manual workers employed in the various sections of the industry.

(7) To establish within six months from the 1st April, 1948, Works Committees for the areas and spheres of operation to be defined under Clause 6 hereof.

(8) To make regulations for conducting the election of the manual workers' representatives for the Works Committees and to give advice and assistance to such Works Committees.

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1. In the various reports and agreements of the Electricity Supply Industry, Works Committees are classified as "negotiating machinery". The pre-nationalisation works committees recommended by the Whitley Reports were more concerned, however, with joint consultation upon safety, health, welfare, efficiency, etc., although the interpretation of national and district agreements was also an important part of their function. After nationalisation, the traditional functions of the Works Committee were separated; their duties in connection with agreements, grievances, works rules, etc., were henceforth the province of a new "Works Committee" (the preservation of the former name has led to confusion), and the other activities - health, welfare, etc. - were placed within the jurisdiction of a "Local Advisory Committee". Thus, when considering the pre-nationalisation era, I found it more convenient to consider "Works Committees" in the chapter on "Consultation and Consultative Machinery", and to preserve the thread of historical continuity post-nationalisation Works Committees are also considered as part of the consultative machinery (see pages 526-8 below). But these very important differences must be borne in mind.
Committees where necessary in connection with the exercise of their functions.

(9) To consider approve or refer back the minutes of the proceedings of the Works Committees in the area.

(10) To determine any matter upon which a Works Committee have failed to agree and which has been referred to the District Council by a Works Committee.

It will be observed that the functions of the District Councils have been both extended and reduced. New duties in respect of works committees have been added, and the District Councils have thus been linked more closely with the workshop level.

One defect of the old Scottish District J.I.C., for instance, lay in the delays and obstacles between claims and grievances being raised at the undertaking and finally settled at District level. In our examination of wages, conditions and hours of work in the Edinburgh Undertaking we saw the misunderstandings which arose among the workers as to their responsibilities and obligations to District Council and N.J.I.C. decisions. Under the new constitution, District Councils are brought closer (in theory) to the workshop level.

On the other hand, the subordination of the District to the National Council could hardly be made plainer than it is in the concluding paragraph of Clause 5.

Although national agreements during and immediately after the war had been gradually standardising rates of wages and conditions among districts, the constitutional powers of District Councils remained strong. National agreements had represented a voluntary delegation of authority, so to speak, by the District Councils, but this did not affect their "residuary powers". To borrow a further metaphor from the political scientist we might say that, although the powers of the states within the Federation were diminishing from 1940 to 1947, it was not until nationalisation that a unitary state was created in the Electricity Supply Industry, with the sole powers of negotiating wages and conditions firmly vested in a central authority - the new N.J.I.C. This centralisation had been urged upon the Minister of Fuel and Power by the General Council of the T.U.C. which had prepared a memorandum to this effect in 1944.
In the case of both the N.J.I.C. and the District Councils it will be observed that the N.U.P.E. is not included among the unions represented. Behind this omission lies a long story of intrigue, threats, inquiries and conferences. The fight was waged with particular bitterness in the Edinburgh area because of circumstances already described in this chapter. When the Scottish Officer of the N.U.P.E., Councillor J. M. Airlie, was appointed a member of the new South East Scotland Electricity Board it seemed as if the N.U.P.E. would continue to keep—and, if possible, extend—its foothold in the Electricity Supply Industry. Councillor Airlie's efforts, however, met with resistance at a higher level, i.e. with the British Electricity Authority and the Minister of Fuel and Power.

As we have seen, Section 53 of the Electricity Act required the British Electricity Authority to "seek consultation with any organisation appearing to them to be appropriate". Here, it seemed to the N.U.P.E., was a means by which it could at last secure representation on the industry's negotiating machinery in spite of opposition by the N.U.G.M.W., the T. & G.W.U. and the E.T.U. The N.U.P.E. Executive Council's report in 1947 referred to this Clause of the Bill. "It is anticipated that, in forthcoming legislation, we shall be able to secure what has so long and so unjustly been denied us." The Council had reminded delegates to this N.U.P.E. conference of the iniquity of the existing system.

"How is representation of J.I.C.'s determined? Is it shared amongst the unions relation to the membership they have in the sphere in which the J.I.C. functions? It certainly is not! It depends on the arbitrary will of those unions that grasped control of the Trade Union Sides of the J.I.C.'s when they were established. N.U.P.E. knows this only too well. How often have we appealed to the unions now monopolising certain J.I.C.'s for a fair allocation of seats on these J.I.C.'s? We have asked them to have regard for the J.I.C. constitution, to have respect for the elementary right of trade union representation. Their response is, in effect, "what we have, we hold!"...How can this scandalous state of affairs be remedied? To whom can we appeal for redress? The T.U.C. regards the matter as one that does not concern/
concern it - as does the Ministry of Labour that promoted the establishment of the J.I.C.'s. This explains why the N.U.P.E. has once again gate-crashed into J.I.C. meetings from which we are unjustly excluded...Our representatives were ejected by the police, but that will not deter us in our endeavour to establish the right to represent our members."¹

The General Council of the T.U.C. had set up a Disputes Committee to discuss disagreements among unions. The N.U.P.E. had asked that consideration of claims for representation upon J.I.C.'s should be considered by this committee, and the Disputes Committee recommended that such disputes should be deemed to fall within its jurisdiction. This recommendation never survived the General Council meeting. The N.U.G.M.W. and the T. & G.W.U. realised the dangers of allowing the Disputes Committee to adjudicate, and they exerted their pressure in the General Council of the T.U.C. to reject the recommendation and reaffirm "their previous policy to the effect that they had no jurisdiction in regard to representation on J.I.C.'s or similar bodies, and the cases submitted could not be dealt with by the Disputes Committee."²

But now, under Section 55, everything was going to be all right. "We hope," stated the 1947 report, "that this shameful denial of trade union rights will be ended by the introduction of this welcome measure dealing with the further organising and control of the electricity undertakings. This Bill is now before Parliament, and steps are being taken by the N.U.P.E. to secure representation on the Joint Wages Boards that will function when the Electricity Bill is enacted."³

Then came the bombshell! On 31st March, 1948, the British Electricity Authority signed an agreement with the five unions already enjoying representation on the old negotiating machinery. The N.U.P.E. had not been considered to be "an organisation appearing to them to be appropriate" for inclusion in any negotiating body.

Why had the N.U.P.E. been treated in this cavalier fashion? The B.E.A.'s defence was that the old machinery had been satisfactory in its union representation. Critics of the B.E.A. suggested that it was significant that Lord Citrine (the new Chairman of the B.E.A.) and Mr. E. W. Bussey (Labour Relations Member of the B.E.A.) had both been active in the E.T.U. and had in the past opposed the claims of the N.U.P.E. The opinion that these officials were influenced by old union rivalries is strongly held among some N.U.P.E. members in Edinburgh. Nor was it possible to secure any satisfaction from the Minister. His intransigentism was based on a reluctance to interfere with the B.E.A. Or could it have been attributed to the influence wielded at Westminster by a group of M.P.'s connected with the two most powerful trade unions in the country, the N.U.G.M.W. and the T. & G.W.U.? Some N.U.P.E. members favour the latter view.

It says much for the loyalty of the N.U.P.E. to the Labour movement that, in spite of seething indignation, they attempted to keep the dispute out of the public eye (and presumably out of the editorial columns of the "Daily Express"). On 24th May, 1949, the N.U.P.E. conference went into private session to consider the whole question. The General Secretary, Mr. Bryn Roberts, moved the following resolution:

"This Conference expresses its grave concern that members of the Union engaged in electricity undertakings continue to be denied the right to make representation to the British Electricity Authority and its Area Boards in respect of their terms and conditions of employment.

The Conference notes and approves the efforts made by the Executive Council to establish these elementary trade union rights and it instructs the Executive Council to take whatever action it deems necessary to secure these rights for our members."

Mr. Roberts warned members that the second paragraph might involve the Union in a legal action against the B.E.A. under Section 53 of the Act. But the risk must be taken in the interests of all members of the N.U.P.E. in the Electricity Supply Industry. In the discussion, strong support came from the Edinburgh delegate (Mr. Guthrie).
Guthrie) who emphasised his own branch's particular interest in the outcome. No matter what the cost, the Executive Council should go ahead and fight. If they were successful they would have upheld a principle of great importance, and as far as Edinburgh was concerned it would have a most beneficial effect. Another delegate cited examples of the way in which other unions were deliberately making difficulties for N.U.P.E. members so that they would have no alternative except to join the bigger unions to secure redress of grievances. Matters had been made far worse by the new nationalised negotiating machinery.

The resolution was passed unanimously, and further approaches were made to the B.E.A., but without success. Whereas in pre-nationalisation days the N.U.P.E. had gained support from individual undertakings like Edinburgh (albeit unsuccessfully) it now was unable to muster any outside support whatsoever. In the B.E.A. it was faced by an unrelenting monolithic organisation; the T.U.C. disclaimed any authority in the matter;1 and the Minister of Fuel and Power played the part of a veritable Pontius Pilate.

The consequence of the exclusion of the N.U.P.E. has been, in Edinburgh, a decline in the influence and numbers of electricity supply manual workers in N.U.P.E., and transfers to the N.U.G.M.W., the T. & G.W.U. and E.T.U. This last-named union has been intensifying its drive for unskilled workers, and it gains prestige from being represented on the negotiating machinery.

Perhaps the heaviest blow received by the N.U.P.E. was its exclusion from the works committees after nationalisation. This aspect is examined in Chapter V, but reference is useful at this point, insofar as exclusion at the workshop level affects/1. This decision of the T.U.C., made against the recommendation of its own Disputes Committee, means that disputes between unions over N.J.I.C. representation cannot be settled within the trade union movement upon the basis of an impartial enquiry. As the General Secretary of the N.U.P.E. has since pointed out: "If the Disputes Committee must not deal with this kind of grievance, where, in heaven's name, must the aggrieved union seek redress?"

This being so, there should be some means of settling the matter outside the trade union movement. The only answer to the problem seems to be an enquiry by the Minister of Fuel and Power into the principles observed by the national boards in selecting unions "appearing to them to be appropriate" for admission to the joint negotiating machinery. Such an enquiry would, at the very least, elicit evidence which is at present inaccessible.
affects the prestige and power of the union at all levels.

The decline of the N.U.P.E. among Edinburgh electricity workers is regrettable when we consider its long and honourable struggle over many years, since the time when (under its old title of the N.U.C.W.) it fought for 6d an hour for labourers at Dewar Place. But it can also be regretted for practical rather than sentimental reasons. According to Councillor Airlie, the union which has come to replace the N.U.P.E., the N.U.G.M.W., is far too large and heterogeneous to give detailed attention to the needs of its members. This "remote-control" has led to strikes in other parts of the country, and if a crisis were to occur in the Electricity Industry in Scotland, he doubts whether the N.U.G.M.W. could maintain the loyalty and control of its rank-and-file to the same extent as the old N.U.C.W. and N.U.P.E. could. Allowance must be made for Councillor Airlie's affection for the N.U.P.E., but his judgement has been borne out elsewhere. And there can be little doubt that the N.U.G.M.W. is disproportionately represented in the negotiating machinery both nationally and at district level, holding the most seats of any single union on both.

It is ironical that representatives of the larger unions (whose contact with the Electricity Supply Industry in Scotland is considerably more recent than that of the N.U.P.E.) persistently refer to the N.U.P.E. as a "break-away" union, a charge which was vigorously refuted in the 1949 report of the N.U.P.E. Annual Conference.

The N.U.P.E. controversy is an example of what can be traced by going beyond official sources. No mention of the episode is made in any of the B.E.A. annual reports or South East Scotland Electricity Board reports. In the pages of these documents, complete harmony runs like a golden thread throughout all industrial relations. The N.U.P.E. does not exist as far as authority is concerned. It is true that the Third Report of the B.E.A. refers darkly to "a claim by a Trade Union, not a constituent member of the National Council" but there is no evidence to show which union it is. Why its identity is so laboriously concealed is difficult to imagine.

Lord/
Lord Citrine, however, speaking at the British Electricity Summer School at Magdalen College, Oxford, in 1949, assured listeners that "the policy of the central authority is based on full recognition of, and cordial co-operation with, the trade unions". Another speaker at the same conference (Mr. H. Norton), referring to the nationalisation of the Electricity Supply Industry, declared:—

"It is a splendid thing that there now exists between Trade Unions in the industry a friendship, a spirit of co-operation, and an appreciation of each other's point of view...It also brought the Trade Unions together in a way which prevented any post-vesting day bickering such as had unfortunately happened in other industries when they have been nationalised."

The employers' side was represented by 3 members appointed by the Division and 7 (not less than 3 of whom should be members of the Area Board) by the Area Board. The union side consisted of 10 representatives of the E.P.E.A.

The constitutions of the N.J.B. and District Board are the same in almost every detail, in functions and relationships, as those of the N.J.I.C. and District Councils. There is identical provision for arbitration, and the N.J.B. is responsible for negotiating terms and conditions of employment. There is one significant difference, however, in that there is no provision in the constitutions for any machinery below District level. The functions of the District Boards thus stop at Clause 5 (of District Joint Industrial Council constitution) which describes the machinery for enquiry into any differences that might arise and the superior powers of the N.J.B. in this respect. There are no clauses relating to the establishment of works committees.

The difference of this negotiating machinery from pre-vesting date machinery is not so significant, insofar as District Boards had always enjoyed far less autonomy than the district boards for manual workers. Agreements at a national level dated, as we have seen, from 1929, and the role of District Boards had been merely to interpret agreements. Edinburgh, for instance, had subscribed to the national negotiating machinery before the existence of any District Board for Scotland.
Technical Engineering Staffs.

N.J.B. machinery was established for the technical engineering staffs under an agreement signed on 31st March, 1948, between the British Electricity Authority and the E.P.E.A. The N.J.B. was to consist of a maximum number of 66 members (33 from each side). The Electricity Boards' members were made up of three from the B.E.A., 14 from the generation and transmission divisions (one from each) nominated by the B.E.A., 14 from the Area Boards (one representing, and nominated by, each Area Board) and 2 from the North of Scotland Board. All 33 union members were appointed by the E.P.E.A. District Boards were also set up, each consisting of a maximum number of 20 members (10 from each side). The employers' side was represented by 3 members appointed by the Division and 7 (not less than 3 of whom should be members of the Area Board) by the Area Board. The union side consisted of 10 representatives of the E.P.E.A.

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Inter-union/
Inter-union rivalry upon the new Boards obviously could not be as serious as among the manual workers. The E.P.E.A. had enjoyed a monopoly position among technical engineers over a very long period, and its claims to represent them on the new Boards were virtually unchallenged. The only controversy that did arise was over the line of demarcation between the N.J.B. and the new machinery for managerial grades, when the Association of Managerial Electrical Executives (formerly the Associated Municipal Electrical Engineers) and the N.A.L.G.O. stepped into the arena to challenge the E.P.E.A. But this controversy was more concerned with definitions of status than inter-union rivalry for representation upon generally accepted machinery.

The E.P.E.A. at present occupies 27 seats on the N.J.B. (although it is permitted a maximum of 33). It will be remembered that, on the N.J.I.C., the trade unions possessed only 12 seats. In each case, the Electricity Boards have taken their full entitlement of 33 seats. These numerical differences are not, however, very significant. Decisions are taken only by a majority vote of both sides, and without a majority vote on the trade union side separately, no decision can be taken. Thus, there is no need for balance between the employers' and employees' side. The E.P.E.A. at present consider the maximum of 33 to be unwieldy. In any case, their present total of 27 is deceptively large insofar as vital decisions are taken by a smaller committee, but the larger number does permit an adequate number of "lay representatives" to sit in on deliberations alongside full-time officials. All the seats are taken up at the District level.

Administrative/
Administrative and Clerical Staffs.

Machinery for administrative and clerical grades was set up on 31st March, 1948. Hitherto these grades in the employment of municipal authorities had been covered by the N.J.C. for Local Authorities' Administrative, Professional, Technical, and Clerical Services. The new N.J.C. for Administrative and Clerical Grades in the Electricity Supply Industry consists of representatives appointed as follows:—

The Electricity Boards' members are appointed by the B.E.A. on behalf of each Generating Division by each Area Board, and by the North of Scotland Hydro-Electric Board. The trade unions represented consist of the N.A.L.G.O., N.U.G.M.W., and T. & G.W.U. Members of the District Boards are appointed by the Generating Division, the Area Board, N.A.L.G.O., N.U.G.M.W., and T. & G.W.U.

The constitution also provides for Staff Committees to perform analogous functions to those laid down for Works Committees under the D.J.I.C. constitution. The functions and relationships of the N.J.C., the District Council and the Staff Committees are for all practical purposes identical with those of the corresponding machinery for manual workers, and there is the same clause relating to arbitration. The N.J.C. is concerned with negotiating terms and conditions of employment, while the District Councils and Staff Committees deal with local questions, usually rising from the interpretation and operation of national agreements.

Although the N.U.P.E. had been represented on the N.J.C. for Local Authorities it was not accepted under Section 53 of the Electricity Act as being suitable for the new machinery. In this particular case there seems little doubt that N.A.L.G.O.'s claims were much stronger, and that N.U.P.E.'s clerical branch was weak, while its administrative branch was almost non-existent. The 1949 report of N.U.P.E. alleged that "N.A.L.G.O. took advantage of the fact that they were stronger in the administrative section of local government to suggest to young officers that their chances of promotion might be seriously hindered if they joined the N.U.P.E."

Yet another door was thus closed to the N.U.P.E., albeit on this occasion with more justification.

1. See page 536.
Higher Executive Staffs.

Completely new machinery for managerial grades was discussed by the B.E.A. and the A.M.E.E. immediately after nationalisation. The B.E.A. was anxious to bring within the scope of collective negotiation all the chief officers and their deputies, and some officers whose duties were primarily concerned with negotiating machinery and establishment. Then there was the problem of senior managerial officers like Power Station Superintendents whom the B.E.A. felt should not be brought under N.J.B. nor N.J.C. machinery. This suggestion involved opening fresh discussions with the E.P.E.A. who claimed that the A.M.E.E. had no right to speak on behalf of these officers, and also with N.A.L.G.O. To meet certain criticisms, the A.M.E.E. changed its name to the "Association of Managerial Electrical Executive" thereby including a comprehensive field of managerial grades of all professions. This move, however, increased rather than allayed the suspicions of the E.P.E.A. and N.A.L.G.O. that their territory was about to be invaded. Discussions took place in 1949 and 1950, during which the B.E.A. suggested that a National Joint Committee should be set up consisting of Electricity Boards' representatives, and representatives from these three professional bodies, with sub-committees or panels to cover specific grades in which it could be established that one of the three had a particularly vital concern.

On 1st August, 1951, an agreement was signed establishing the "National Joint Managerial and Higher Executive Grades Committee". This National Committee consists of representatives of the Authority (including the Generating Divisions), the Area Boards and the North of Scotland Hydro-Electrical Board, and from the employees' side, the A.M.E.E., the E.P.E.A., and the N.A.L.G.O. The first member took office on 1st September, 1951. Functions and procedures are similar to those of the other national negotiating bodies, and there is provision for arbitration. The machinery is simple in character and does not include District bodies; but provision is made for the establishment of appropriate means of local consultation between representatives of the Electricity Boards and the Associations. The Committee cover staff
in the managerial and higher executive grades who are outside the scope of either the N.J.B. for technical engineering staff or the National Joint Council for administrative and clerical grades. The chief officers and their deputies, and some officers whose duties are primarily concerned with negotiating machinery and establishment, are treated by the Authority as being outside the scope of collective negotiation.

Although a salary claim was submitted during 1952 by officers under the scope of this National Committee, no agreement has yet been reached. The claim of the three Associations covered the period since vesting day; they argued that officers in this category had been completely bypassed in the many awards granted to other categories of workers during this period.
The "tidying-up" process in negotiating machinery after nationalisation met with formidable obstacles in the building and civil engineering workers. Here it was not merely a case of rates and conditions varying between districts but that some workers came under building trade conditions while others came under conditions determined by the N.J.I.C. for the Electricity Supply Industry. A few came under the jurisdiction of both. The position was particularly unsatisfactory with regard to labourers who enjoyed different conditions from those of labourers under the N.J.I.C.

On 23rd November, 1948, an agreement was signed between the B.E.A. and the National Federation of Building Trades' Operatives setting up the National Joint (Building and Civil Engineering) Committee. The Committee consists of representatives of the B.E.A., the Generating Divisions, the Area Boards, the North of Scotland Hydro-Electric Board, and the N.F.B.T.O. The functions of this national body are the same as the other national councils, and there is the usual clause relating to arbitration. The outstanding difference is that there is no provision for district or works committees, and the machinery is less complicated generally. Questions arising locally out of the application or interpretation of terms and conditions of employment are first discussed between the local representative of the B.E.A. or Area Board and the accredited Federation shop steward. In the event of no agreement being reached, the matter is referred to the appointed representative of the Electricity Board, the Federation Regional Secretary, and the District Labour Relations Officer. In the event of further failure to agree, the difference is referred for decision to the N.J.C. The last court of appeal lies through arbitration.

1. These workers were considered under the heading of "Manual Workers" in the pre-nationalisation section.
The N.J.I.C., the N.J.B. and the N.J.C. have appointed smaller negotiating committees to do the detailed work of negotiation of issues which come before the full Council. They also hear the appeals from districts on which, in order to save time, they have executive power to give a decision which is applicable without reference back to the full national machinery.

The National bodies have also set up a Co-ordinating Committee in an effort to deal with problems that are common to all grades of employees, in such a way that a uniform decision can be given, acceptable to all. The Co-ordinating Committee has no executive power. It sends its recommendations back to the three separate national machineries. Any attempt, of course, to standardise conditions too much between the three machineries would be a great mistake, because it would be unrealistic to pretend that the problems which face all grades of workers in the industry are the same, or that there is the same reaction to particular problems.

There is one important aspect of the negotiating machinery which is none the less important because it lies out with the formal organisation of industrial relations. The trade union side of the negotiating machinery do examine with extreme care all the claims they put forward; very often they reduce them. They try to act with a full sense of responsibility, even at the risk sometimes of a certain degree of unpopularity with their own members, and endeavour to go forward with something which is a reasonable and fair claim. This process of "filtering" avoids overloading the negotiating machinery. Certain improvements, however, could be made in the process of negotiating as distinct from the organisation. The Trade Unions feel the lack of somebody with whom, apart from the negotiating machinery, they can have prior discussion. The Act, as we have seen, created the machinery and it stipulated that the Area Boards and the Authority were equally bound by decisions of the councils and boards. But the trade unions do not wish to have everything put into the atmosphere of formal negotiation, or to have to load the negotiating machinery with small items. There should exist some body, to whom they can go and say "this is the problem, and this is what we ask the Authority and Area Boards to do". There is/
is need for some body who can settle things with the trade unions before invoking the negotiating machinery. There has been a lack of co-ordination, with the result that decisions have been taken on the negotiating machinery, which have been misinterpreted and misapplied by the Establishments and Administrative sides of the boards, in a way which has been misunderstood and quickly resented by the employees, who at a local level do not appreciate what has happened.

Consultation and Consultative Machinery

In the early days of the mutual consultative machinery the place between the bodies who can settle things with the trade unions before invoking the negotiating machinery. There has been a lack of co-ordination, with the result that decisions have been taken on the negotiating machinery, which have been misinterpreted and misapplied by the Establishments and Administrative sides of the boards, in a way which has been misunderstood and quickly resented by the employees, who at a local level do not appreciate what has happened.

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CHAPTER V.

Consultation and Consultative Machinery

In the early days of the undertaking consultation took place between the Resident Electrical Engineer and representatives of the workers, usually elected at the place of work. Full-time trade union officials appeared at a later date, and until about 1913, discussions between the unions and management seem to have been largely confined to official correspondence. When matters could not be resolved easily, the official would be invited to appear before the Electric Lighting Committee, either alone or with a deputation consisting of union and lay representatives. In cases where a local honorary officer of the union was employed in the undertaking there would, of course, be more direct contact. In 1915, for instance, a local officer of the Operative Bricklayers' Society was employed as a bricklayer at Dewar Place. Just before the outbreak of the 1914 war, direct contact between the Resident Electrical Engineer and full-time officials was increasing. In 1914 he met the local N.U.C.W. official to discuss the question of boy labour although nothing came of the N.U.C.W.'s complaint. The Resident Electrical Engineer's attitude was upheld by the Committee. In January, 1917, after a discussion with the N.U.C.W., the Resident Electrical Engineer persuaded the Committee to issue free boots and overalls to attendants employed upon the sewer pumps. The attitude of the management seems to have been tolerant and fair upon many small items of welfare and safety raised by the men, and indeed fairly generous in the interpretation of conditions of work (where agreements of any sort existed). Upon disciplinary matters the management was naturally more unyielding. In May, 1920, a blacksmith was dismissed for absenting himself from duty without permission. This employee apparently had called a meeting of tradesmen in his department, during working hours, on Friday, 3rd April. He moved that the tradesmen should take May Day as a holiday, but nobody seconded this resolution. Notwithstanding the cowardice of his politically unconscious comrades, the blacksmith considered the resolution carried as far as he was concerned, and did not turn up for work on Saturday, 1st May. He was accordingly dismissed. The Edinburgh and District Trades Council appealed to the Electric/
Electric Lighting Committee in a letter dated 6th June, and they sent a deputation to that month’s meeting. The Committee upheld the decision of the Resident Electrical Engineer, but after a further protest it was decided on 29th June to hold an enquiry. Three councillors were appointed to investigate the matter, and they met on 1st July, 1920. The blacksmith claimed in his defence that he had asked the Station Foreman for permission to be absent, and he had understood that the reply had been in the affirmative. When questioned further, he declared that he had not known that only the Station Superintendent possessed authority to grant leave of absence. It was decided that the penalty should be relaxed and the first suitable vacancy in the department should be offered to the man. He was reinstated at Dewar Place on 16th August, 1920.

The management was opposed to any intervention of union officials at the place of work. On 14th July, 1922, the Secretary of the Plasterers' Union was refused permission to interview one of his members within the Portobello Power Station. On 18th December, 1922, however, permission was granted to the Secretary of the N.U.C.W. to display notices of union meetings upon the works' notice-boards. To demonstrate that this was not a concession to trade unions alone, the Charlotte Chapel Evangelistic Association was granted a similar privilege shortly afterwards.

In view of the adherence of the Edinburgh Undertaking to the N.J.I.C. and D.J.I.C., it is surprising that there was no attempt to set up Work Committees on Whitley lines. Although it would perhaps have been difficult to associate electricity workers with "improvements in method and organisation of work" (as suggested by the Whitley Report) to the same extent as workers in such industries as engineering, potteries, and coal, there remained a very wide field in which formal works committees could have done useful work. One valuable consequence of the N.J.I.C. machinery, however, was the increasingly friendly attitude of management to shop stewards, and the recognition afforded to these men by the Edinburgh Undertaking meant that methods of consultation improved. Indeed, informal "joint shop stewards' committees" performed many of the functions that the Whitley Reports had conferred upon/
Disciplinary matters, however, were closely guarded by the management. Under Section 38, Sub-section (2) of the Edinburgh Corporation Order of 1933 the powers of chief officials were reaffirmed. A departmental head was entitled to appoint, suspend and dismiss members of the staff of such a department, but in the case of dismissal, any person aggrieved by the decision of the head of the department had the right of appeal to the Committee of the Corporation responsible for the administration of that department.

The advantage of the informal joint shop stewards' committees was that they could press for the implementing of D.J.I.C. decisions without getting too involved in the formal negotiating machinery. For instance, trade unions not represented upon the D.J.I.C. or N.J.I.C. could make their presence felt at the workshop level. The N.U.P.E. was very active on behalf of its members in the Edinburgh Undertaking, although it was denied a place on the D.J.I.C.

The outbreak of war in 1939 resulted in an increased status and more formal and regular meetings for the shop stewards' committees at Portobello and Dewar Place, which now came to be designated "Joint Works Committees". Consultation became increasingly important under the impact of war, and the shortages of labour. Adjustments in hours worked, changes arising from transport difficulties, fire-watching, and air-raid precautions, and the need for canteens all required continuous discussion between management and labour. The diminishing effect of the threat of dismissal as a disciplinary weapon resulted in increased co-operation from management, although even before the war the Edinburgh management had participated with good grace in the more informal consultation of that period.

In 1944, however, several incidents were raised upon the Joint Works Committee at Portobello for which no compromise solution could be found, each side refusing to yield. Tempers were rouse and insults exchanged, and the Engineer and Manager dissolved the committee. In July, 1944, the Edinburgh and District Trades Council protested to the Electricity Sub-committee which appointed a special sub-committee to investigate/
investigate the matter. The councillors appointed to this sub-committee visited Portobello Power Station, and after discussing the situation with various employees and taking long statements from the Engineer and Manager and his deputy, they resolved "that the Joint Works Committee as at present constituted be dissolved, and that its activities cease forthwith; and that the Edinburgh and District Trades Council be informed accordingly".

The worsening of relations at the Portobello Station after this episode was due, according to the trade unions, to the increasing reluctance of the management to discuss and co-operate with union representatives and shop stewards. The management, they alleged, became extremely "high-handed" after the dismissal of the Works Committee. Early in 1947 there occurred an incident which provoked a strike, and which might well have been averted if proper consultative machinery had existed. Two employees were suspended for refusing to work overtime. These men, who were joiners, complaining about orders which had been given by the management to work overtime, stated that the attitude of the management towards applications to be excused from working overtime had been arbitrary and "not a right and proper one". The E.T.U., which advanced the men's claim, extended their complaint (perhaps unwisely) and requested the Electricity Sub-committee to receive a deputation "with regard to the question of whether the right of the Manager to suspend employees was part of their conditions of employment". The Town Clerk reminded the Sub-committee of the provisions of Section 38 of the Edinburgh Corporation Order of 1933, and although the deputation was heard, no action was taken by the Sub-committee to reinstate the men concerned. Accordingly, on 17th February, 1947, the E.T.U. intimated a stoppage of work by joiners. The Regional Industrial Relations Officer, on 18th February, declared that in his view a difference existed which should be referred to the D.J.I.C., and the men agreed to return to work in view of this. Three points were submitted to the D.J.I.C.:— (1) whether the management was entitled to order the working of overtime by employees (as a class) in the case of breakdown or emergency work and repairs (2) whether the present practice of the Electricity Department/
Department in dealing with applications to be excused overtime was a right and proper one, and (3) in the circumstances of the case which resulted in the suspension of the two men, to what extent the subsequent actions of the parties were justified.

On 27th February, the S.D.J.I.C. expressed "very great concern over the unconstitutional action taken by the employees concerned, who had brought about a stoppage of work before recourse had been taken to the procedure laid down in Clause 11 of the Constitution of the N.J.I.C." They passed the following resolutions:—

(1) That the District Council bring to the notice of the men concerned in the dispute at Edinburgh the existence of Clause 11 of the Constitution of the N.J.I.C., and that all parties be instructed to ensure that the constitutional procedure for dealing with differences should be strictly adhered to.

(2) The management of an undertaking has clearly the right to require an employee to work overtime in cases of breakdown or emergency, subject always to reasonable and sympathetic consideration being given by the management to any application by the employee to be exempted from overtime work.

(3) That the Edinburgh Undertaking be recommended to nullify the suspension of the two men concerned in this dispute, on condition that a committee of the D.J.I.C. will meet the employees, along with their representatives, and the management of the undertaking, with a view to removing the alleged existing embargo on overtime work, as being exercised by certain employees of the undertaking."

These recommendations were accepted, and the dispute was settled. Insofar as it was a procedural question, concerned fundamentally with the channels of securing exemption from overtime in special circumstances, the matter was obviously one which could have been better settled at workshop level, and the absence of proper consultation involved the undertaking in unnecessary inconvenience and industrial tension. It is interesting to observe what subsequently happened under nationalisation to the men involved in this little drama. The Engineer and Manager (the man who dissolved/
dissolved the Works Committee) is now Divisional Controller of South Eastern Scotland, and as such is responsible for setting up works committees in all undertakings under his jurisdiction, as required by the new National Agreement. One of the jointers he dismissed for refusing to work overtime is now an eminently respected member of Edinburgh Town Council and employed on public relations by the South Eastern Scotland Area Board (Edinburgh Sub-Area).

Post-Nationalisation.

On 31st March, 1948, an agreement was signed between the B.E.A. and selected unions (see page 513). The preamble to this agreement included the following provision:

"There shall be established within six months from the 1st April, 1948, in the area of each D.J.I.C., works committees for such areas or spheres of operation as may be defined by the appropriate D.J.I.C. in pursuance of Clause 6 of the said District Council."

The constitution of these works committees was laid down in "Schedule 3" of the agreement. Their functions were defined as follows:

1. To secure that the employees shall be given an interest in and responsibility for the conditions under which their work is performed.

2. To secure the greatest possible measure of joint action between the Electricity Boards and the Manual Workers' representatives in order to ensure that terms and conditions of employment settled from time to time by negotiation or arbitration through the machinery of the National Council are observed by the Electricity Boards and the employees within the sphere of operation of the Works Committee.

3. To deal with matters arising out of the application within such sphere of operation of the terms and conditions of employment mentioned in Clause 2 hereof and in particular the following matters:

(a) Working hours; breaks; time recording; duty schedules; and shift rotas.

(b) Payment of wages (form of pay ticket and the time and method of payment).

(c) Arrangements for holidays.

(d) Settlement/
(d) Settlement of internal grievances.

provided that the Works Committee shall not in any event have power to negotiate terms and conditions of employment.

4. To arrange for the exhibition of rules made from time to time by the Works Committee and for the supervision of notice-boards.

5. To consider and give effect to such rules and regulations as may be issued from time to time by the Electricity Boards so far as such rules and regulations relate to the functions of the Works Committee.

6. To enquire into any difference which may be referred to them by the Electricity Boards' Representatives or the Manual Workers' Representatives in relation to the application of the terms and conditions of employment referred to in Clause 2 hereof and in connection therewith:

(a) To investigate the full facts as affecting all the parties between whom the difference has arisen.

(b) To make and communicate to the parties the recommendations of the Works Committee thereon.

(c) To use all available means for settling the difference.

(d) To refer the difference to the District Council at the request of a majority of either the Electricity Boards' Representatives of the Manual Workers' Representatives in case the Works Committee are unable to settle it.

Provided that any recommendation made under the provisions of this Clause shall be in conformity with the terms and conditions of employment settled from time to time by negotiation or arbitration through the machinery of the National Council and it shall be competent for the District Council to veto any recommendation which is not in such conformity.

7. To make arrangements to secure that an employee who desires to discuss a grievance in relation to any matter covered by Clause 3 hereof shall comply with the following procedure:

(a) The employee shall in the first instance discuss the grievance with the appropriate/
The appropriate officer of the Electricity Board and may if he so desires be accompanied and assisted by his Manual Workers' Representative.

(b) Failing a settlement of the grievance the employee shall remit the matter to his Trade Union (being a party to the Agreement under which this constitution is established) for further discussion with the appropriate officer of the Electricity Board.

(c) If the Trade Union does not affect a settlement of the grievance the representative of either the Electricity Board or the Manual Workers shall refer the difference to the Works Committee and the Trade Union shall have the right to appear before the Works Committee.

It will be noted that Clause 3 gives the workers a voice in several matters which were previously considered to fall within the jurisdiction of management—matters which Managers of a previous era would have refused to discuss with the workers. How far, it may be asked, is this written obligation to consult the workers being put into practice? As far as the Edinburgh Undertaking is concerned, it seems to be honoured. At an Edinburgh Sub-Area Works Committee meeting at Dewar Place which I attended on 21st February, 1952, there were several items discussed which conformed with Clause 3 of the Agreement. The management accepted, for instance, a worker's suggestion to put the time for payment of wages on Fridays forward to 4.45 p.m. One worker raised the question of the collection of wages by wives of employees who were sick and the practice was to make the wives stand in the ordinary queue. Could not they collect the wages immediately from the enquiry office? The men had no objection to the ladies being given preferential treatment. This proposal was accepted, although the Chairman (the Sub-Area Manager) said that it might be difficult to arrange for those workers who fell sick on Friday morning. A Workers' representative replied that very few men fell ill on Fridays! Then someone asked whether alternative arrangements could be made when it was raining, as the men had at present to queue up in the rain. The management promised to look into this, but could not promise an immediate decision. The question of holidays was then raised.
The Consumers' Service Department (our old friends the meter-readers in yet another disguise) wanted Christmas Day to be a holiday for N.J.I.C. personnel, and after lengthy discussion it was decided to arrange for a ballot among all workers. They would be asked whether they wished to have Christmas Day as a public holiday, giving up one day of either the Spring or Autumn holiday.

An item was also discussed (as provided for in Clause 4) in connection with the Works' notice-board in the Edinburgh Contracting Workshop. The Manager said that three trade union notices had been put up recently. He had no objection to the notices themselves, but objected to the complete disregard to agreed procedure for exhibition of notices. The management had not been consulted, as they should have been, and he would "take a serious view of any recurrence of infringement of the agreed procedure". The workers concurred in this statement.

The Manager, at the end of the meeting, brought up the question of redundancy, stating that there had been a sharp falling off in electrical contracting work, and that 3 electricians and 4 mates would have to be laid off. He promised that every effort would be made to keep on men with longer service, and the Workers' representative thanked the Manager for bringing this question of redundancy forward before putting it into effect. The harmony was disturbed, however, by an E.T.U. member who refused to participate in the discussion, and withdrew from the meeting, presumably to free himself from any responsibility for a decision which his trade union might challenge at a later date. Nevertheless, the inclusion of the question of redundancy on the agenda of the Works Committee indicates a liberal interpretation of Clause 1 on the part of management. Yet the concession is not without its disadvantages from the trade union point of view insofar as it might lend the stamp of union approval to dismissals. In this particular instance, however, there was an added complication. The men concerned were employed in the contracting department, and the E.T.U. had claimed separate negotiating machinery for these workers at a recent dispute at the Bethnal Green Undertaking. The Electricity Boards' contracting department sent out electricians to perform such tasks as wiring private houses on a commercial/
commercial basis, competing with private enterprise electricians. The E.T.U. claimed that electricians employed on contracting work should not be classified with ordinary supply electricians, and refused to accept the jurisdiction of the N.J.I.C. in this matter. There was consequently an added reason why the E.T.U. at Edinburgh rejected the right of the Works Committee (which was an adjunct of N.J.I.C. machinery) to discuss the redundancy of these electricians. A subsequent arbitration award, however, ruled that separate negotiating machinery was not necessary for electricians employed on the contracting side, and placed them within the scope of Works Committee discussion.

There is, however, nothing radically different in the foregoing functions of these Works Committees from the old Whitley proposals. The Ministry of Labour "Model Constitution for Works Committees" (1918) had listed similar functions, and had also included "questions of discipline". The 1918 report had added that its list of functions was "not meant to be exhaustive", and there is nothing in the functions listed in the 1948 Agreement which would not have been acceptable to the Ministry in 1918. The interpretation put upon the Agreement by the Scottish D.J.I.C. and by the Edinburgh Sub-Area is perhaps no more generous than the 1918 report expected from its adherents, although it is true to say that very few industries did, in fact, adhere in letter and spirit to the 1918 recommendations.

As far as the Electricity Supply Industry was concerned, and particularly the Edinburgh Undertaking, these new functions considerably extended the scope and nature of joint consultation at the workshop level.

Let us now consider in detail the provisions for representation and procedure of the Works Committees as laid down in this 1948 Agreement. The clauses referred to are numbered separately from the clauses relating to functions, which appear in a different section.

The sphere of operation of the Works Committee was to be defined by the District Council, which was also to issue regulations for the ballot for the election of manual workers' representatives, provided that the manual workers' representatives shall/
shall be elected in such manner as to secure that so far as practicable the interests of all branches or departments within the sphere of operation of the Works Committee are represented. The District Council is also bound to observe Clause 4 of the Agreement, which lays down that candidates for election and employees eligible to vote shall:

(a) be twenty-one years of age or over
(b) have been in the service of the Central Authority or the Area Board (or their predecessors) for the period of six months immediately preceding the ballot provided that no employee shall be eligible to be a candidate for election unless he is a member of a Trades Union which is a party to the Agreement under which this constitution is established.

Under Clause 5, nominations of candidates were to be proposed and seconded at least ten days prior to the ballot by two employees who were entitled to vote, and nominations must be posted on the notice board and communicated to each branch or department. "All reasonable facilities shall be provided by the Electricity Boards for carrying out the provisions of this and the preceding clause." The Electricity Boards were also enjoined (Clause 13) to provide facilities for holding the meetings of the Works Committee or any sub-committees including the necessary accommodation and the meetings were to be held during normal working hours. Manual Workers' representatives receive their normal rates for the time spent at such meetings. One interesting provision (Clause 14) lays down that the Board must provide similar facilities for a meeting "immediately prior to each meeting of the Works Committee or of any sub-committee thereof". Payment should be made for time spent at this meeting, but "no business other than that appearing on the agenda of the Works Committee or sub-committee shall be transacted at such meeting". Meetings of workers' representatives other than those provided for in Clause 14 could, however, be held during working hours and without loss of pay, subject to the permission of the Chairman and Vice-Chairman of the Works Committee. Chairman and Vice-Chairman were elected by the Boards' representatives and the Workers' representatives in alternating/
alternating years. Thus when the Chairman is a Board representative the Vice-Chairman is a Workers' representative, and vice versa. Joint Secretaries were nominated, one from each side. The administrative expenses of the Works Committees were to be met by the Electricity Boards. There were the usual joint committee provisions about voting, decisions requiring a majority from each side, and in the case of any failure to agree, matters could be referred (at the request of a majority of either side) to the District Council. Copies of the minutes must be forwarded to the District Council for approval or reference back, and a copy posted in each department or branch within the sphere of operation of the Works Committee. The last provision (Clause 25) lays down that "no information regarding the business of the Works Committee or of any sub-committee shall be given to the Press". This is rigidly enforced. Each side watches the other to make sure that unaccredited representatives are being "smuggled" into meetings. My own visits to Works Committee meetings at Dewar Place had to be approved by a majority of both sides before I was admitted.

Let us examine the ways in which the Scottish District J.I.C. and the Edinburgh Sub-Area of the South East Scotland Electricity Board have implemented this Agreement. As far as possible, separate committees have been set up for Areas and Divisions. Thus, in Edinburgh there is a committee at Dewar Place and another under the Division at Portobello. The S.D.J.I.C. has laid down four categories of workers who must be represented on each Works Committee: (a) skilled workers (2 representatives) receiving 37.5d an hour and over; (b) semi-skilled workers (2) up to 37.5d an hour; (c) unskilled (2) up to 32.5d an hour; and (d) shift workers (1), making seven representatives in all. The Boards' representatives (5 in all) are all from the staff of the Sub-Area Manager. Although the Personnel Officer of the Area Board sometimes attends the meeting, he is merely there in the capacity of adviser and not as a representative. At a meeting in February, 1952, the Chairman of the Works Committee (the Sub-Area Manager) called the Personnel Officer to order for talking to me while the meeting was in progress. Although the rebuke was fairly good-humoured, it/
it illustrates the faint resentment felt by the Power Station engineer executive towards the Area official who interferes at the workshop level. Works Committee affairs are regarded as definitely a matter for local settlement; higher-level intervention is only appreciated in event of an impasse.

In their choice of Personnel Officer (who is responsible for Industrial Relations) the South East Scotland Electricity Board has certainly not erred on the side of the conventional bureaucrat, although it is true that the officer in question has not had long experience in the Electricity Supply Industry itself and is, therefore, to some extent suspect among the engineers of the old school who have spent half a century among turbo-generators. The Personnel Officer is the son of a Glasgow colliery manager; he emigrated to Canada during the depression years and worked as a lumberjack and on the Canadian Pacific Railway. Returning to this country, he secured a job in the personnel office of a large engineering organisation. His approach is strictly practical, and he is somewhat sceptical about psychologists who read papers on man-management at annual conferences of the Institute of Public Administration. He manages to give quite a lot of unobtrusive help at the workshop level without incurring too much hostility.

Clause 13 is scrupulously observed, although the term "necessary accommodation" was somewhat illiberally interpreted. The meetings at Dewar Place are held in the Manager's office which is pleasant and spacious enough, but the Board representatives occupy chairs whilst the workers sit on wooden forms grouped in a semi-circle at the other side of the room. This arrangement was presumably a reminder that status should not be forgotten even during Works Committee meetings.

The problem of acquainting all workers with the proceedings of the Works Committees was dealt with in Clause 24, which provided for posting copies of minutes upon the notice-board. In practice, however, this is not adequate. Many manual workers employed outside rarely visit the headquarters, and consequently do not see the notice-board. According to the Personnel Officer, this is a serious defect in communication downwards.
The problem of keeping the workers fully informed is only one aspect of a much bigger problem - how to secure the fullest participation of the workers in the new democratic process. As in the political sphere, their right to vote, and the machinery for voting, are fully provided for. The question now is how to invest these theoretical rights with reality. A John Stuart Mill would no doubt take an optimistic view of Works Committees; we need not be apprehensive as to the consequences of granting power prematurely. Only in the exercise of power do we learn how to use it properly. But Mill was answering those critics who feared the extravagant abuse of power; in the industrial sphere we are faced with the opposite problem – the problem of indifference towards the new Works Committee machinery.

The view of the Edinburgh Sub-Area Manager is that the effectiveness of Works Committees is threatened by shop stewards who continue to be active in parallel channels. Shop stewards are, of course, elected by trade unionists in the workshop, and the Manager is merely notified by the trade union concerned that such-and-such a person has been elected. The danger of this procedure is (as it has always been) that the shop steward may have been elected by an unrepresentative gathering of his fellow trade-unionists. Only five or six people may have turned up to vote him into office.

The machinery for Works Committees is, on the other hand, more democratic. As we saw under Clause 4, workers over 21 (without any trade union membership requirements) were eligible to vote. In the Dewar Place Undertaking, ballot papers are inserted in the pay packets, and the widest possible publicity is given throughout the works as to the candidates and the procedure of election. The candidates, however, as described, must be members of one of the "Big Five" trade unions associated with the N.J.I.C. and D.J.I.C. machinery. In this manner the N.U.P.E. was excluded from the consultative machinery. Formerly the management had been prepared to discuss questions with shop stewards from any sufficiently well-represented trade union, regardless of whether this trade union had been admitted to district or national deliberations. This was one reason why the N.U.P.E. had maintained its hold/
hold locally. Since nationalisation, however, the power of the "Big Five" has been extended downwards to the workshop level. As the five unions concerned are virtually in "non-competing groups", each now enjoys a monopoly at all three levels - national, district and local. The monopoly position which they enjoy in respect of the negotiating machinery can be used as a lever in the sphere of consultation.

This is not only unjust, in the opinion of Councillor J. M. Airlie of the Area Board, but it is less efficient. You have not ended the influence of shop stewards merely by ceasing to regard them as an integral part of consultation. The new machinery, according to Councillor Airlie, is "more elaborate but not more efficient". Members of trade unions outside the "Big Five" resent the limitations placed upon their choice of representatives for the Works Committee, and in consequence are cautious in the support they give to committee decisions. Theoretically, however, this grievance should cease when the smaller unions have been finally driven from the field. It must be argued that it is a defect in trade union representation at N.J.I.C. and D.J.I.C. level rather than in the Works Committee constitution. On the other hand, it seems that there has been an excessive preoccupation with bringing the Works Committee into line with negotiating machinery in spite of its concern with local problems which could better be solved by more flexible representation.

There can be little doubt that, at present, Works Committee representatives are not confident that they can claim support for their decisions. In the discussion on holidays, at the February meeting at Dewar Place, they pleaded that it had been impossible to find out what their constituents wanted, and that if they reached a decision it might be repudiated. Hence their suggestion that a ballot be held; in other words, a return to the methods of direct democracy was the only solution.

In the compromise between accredited trade union candidates and non-union constituencies the Board seems to have got the worst of both worlds. Excluded trade unions are indignant; members of the recognised unions tend to use their trade union branches rather than the Works Committee as channels for grievances. One such case concerned a foreman at Dewar Place who refused to give a job to an applicant sent by/
by the Ministry of Labour, on the grounds that he was technically incompetent. The man's trade union demanded to know why he had not been appointed, and summoned the foreman (who was a member of the same union) to appear before it. The foreman was fined £5 for his action. This episode shows the weakness of including foremen (in the Electricity Supply Industry) in the ordinary manual workers' negotiating machinery, thereby compelling them, more or less, to join one of the "Big Five" trade unions along with their men. Its relevance here, however, lies in the fact that disciplinary matters which theoretically lie within the scope of the Works Committee can be discussed and judged outside the recognised channels.

In addition to the Works Committees there are, in the South East Scotland Area, two local staff committees which operate under the District Joint Council for Administrative and Clerical staffs. Geographically these committees cover:-

(i) The Lothians Sub-Area, Southern Sub-Area, Edinburgh Sub-Area and Board Headquarters

(ii) The Fife and Central Sub-Areas.

The South East Scotland Division has only one staff committee for clerical and administrative employees, and this meets at Portobello.

The functions of these committees are similar to those of the Works Committees. Since they have been set up their main activity has been concerned with appeals against gradings allotted to employees. The tendency among administrative and clerical workers is to raise grievances with the staff committee rather than with their union (which for most of them is the N.A.L.G.O.). Very few of them attend N.A.L.G.O. branch meetings.

No local staff committees have been set up on South East Scotland for the technical staffs. According to one engineer at Board Headquarters, "we get along without them very well". The E.P.E.A. branch is at present strongly opposed to the setting up of such committees. It is argued that formal monthly meetings would be a waste of time, and it is more convenient for the staffs to approach senior officials informally. If necessary, they can call in the permanent E.P.E.A. official for Scotland/
Scotland. The Association employs only a small permanent staff and it is reluctant to enter into all the commitments that would arise from setting up local committees. The only disadvantage that was attributed to the absence of these committees was concerned with locally arranged holidays. The variation between Scottish holidays and nationally arranged holidays involves considerable discussion between workers and management, and whereas the Works Committees and administrative staff committees are able to arrive at amicable agreement with the Board, technical staffs have no consultative machinery for this purpose. It has accordingly been decided to set up ad hoc holiday committees for technical staffs, but there is still no intention of establishing any formal meetings on the lines of Works Committees.

It will be observed that the activities of the Works Committees and local Staff Committees set up in the Electricity Supply Industry do not exhaust the traditional functions of joint consultation. Indeed, these committees really derive directly from the negotiating machinery of the industry. The 1948 Agreements which created them (along with National and District councils) was drawn up to conform with Section 53 (a) of the 1947 Act, i.e. "the settlement by negotiation of terms and conditions of employment".

The more usually accepted functions of joint consultation are set forth in a separate sub-section of the Act. Section 53 (b) lays upon the Authority the duty to "seek consultation with any organisation appearing to them to be appropriate" with a view to the setting up of machinery for "the promotion and encouragement of measures affecting the safety, health and welfare of persons employed by Electricity Boards and the discussion of other matters of mutual interest to the Boards and such persons, including efficiency in the operation of the services of the Boards". We are much closer here to the functions proposed by the Whitley Report which were largely neglected by the old N.J.I.C. and D.J.I.C. in the Electricity Supply Industry. All the emphasis in the past had been upon the negotiating side rather than the consultative.

Under Section 53 (b) completely new machinery was established, to operate parallel/
parallel to the negotiating machinery, although at the local level there is some overlapping. An agreement was signed on 1st January, 1949, between the B.E.A. and the "appropriate" trade unions, providing for a National Joint Advisory Council, District Joint Advisory Councils, and Local Advisory Committees. The functions of the N.J.A.C. were to promote and encourage measures affecting the safety, health and welfare of persons employed by the Electricity Boards and to discuss other matters of mutual interest to the Boards and such persons, including efficiency in the operation of the services of the board and also to afford a means of consultation between the Boards and the appropriate trade unions for "advancing the skill of persons employed by them and for improving the efficiency of the equipment and the manner in which that equipment is to be used, including provision by Electricity Boards and the assistance of the provision by others of facilities for training and education. Membership of the N.J.A.C. consisted of:-

Electricity Boards' members:

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Authority</td>
<td></td>
</tr>
<tr>
<td>The Chairman</td>
<td>1</td>
</tr>
<tr>
<td>Deputy Chairman</td>
<td>2</td>
</tr>
<tr>
<td>Full-time members</td>
<td>1</td>
</tr>
<tr>
<td>Part-time members</td>
<td>3</td>
</tr>
<tr>
<td>Divisional Controllers</td>
<td>14</td>
</tr>
<tr>
<td>Area Boards</td>
<td></td>
</tr>
<tr>
<td>Chairman</td>
<td>10</td>
</tr>
<tr>
<td>Deputy Chairman</td>
<td>3</td>
</tr>
<tr>
<td>Member</td>
<td>1</td>
</tr>
<tr>
<td>North of Scotland Board</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>1</td>
</tr>
<tr>
<td>Officer</td>
<td>1 - 37</td>
</tr>
</tbody>
</table>

Trade Unions' members:

<table>
<thead>
<tr>
<th>Trade Union</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.E.U.</td>
<td>2</td>
</tr>
<tr>
<td>E.T.U.</td>
<td>3</td>
</tr>
<tr>
<td>N.U.E.F.M.E.W.</td>
<td>1</td>
</tr>
<tr>
<td>N.U.G.M.W.</td>
<td>5</td>
</tr>
<tr>
<td>T.G.W.U.</td>
<td>3</td>
</tr>
<tr>
<td>Clerical &amp; Administrative Workers' Union</td>
<td>1</td>
</tr>
<tr>
<td>N.A.L.G.O.</td>
<td>2</td>
</tr>
<tr>
<td>E.P.E.A.</td>
<td>4</td>
</tr>
<tr>
<td>A.M.E.E.</td>
<td>1 - 22</td>
</tr>
</tbody>
</table>

The Chairman of the N.J.A.C. is chairman of the B.E.A. (Lord Citrine) and the Vice-Chairman is appointed by the trade union representatives from among their number. Six Standing Committees were set up: General Purposes, Education and Training/
Training, Efficiency, Health, Safety and Welfare. A full-time member of the B.E.A. is Chairman of each standing committee, and a trade union representative is Vice-Chairman. There are representatives on the various committees from Government departments and, in addition, people are co-opted from such important bodies as the Institute of Electrical Engineers, Royal Society for the Prevention of Accidents, and the Industrial Welfare Society, when the need arises in order to give specialist advice.

Clause 11 provides that "the council shall hold
(a) an ordinary meeting not less frequently than once in every three calendar months; and
(b) a special meeting within fourteen days of the receipt by the Secretary of a written request from the Chairman, Vice-Chairman, or any twelve members, specifying the matter or matters which it is desired to bring before the meeting.

The remaining procedure follows the pattern of the N.J.I.C., except for Clause 17 which states that "the opinion of the Council and any Committee on all questions shall be reached as far as possible by general agreement and shall be so recorded". This Clause is repeated in the schedules setting up D.J.A.C.s and Local Advisory Committees. There is no provision for majority voting by either or both sides.

The decision to place negotiation and consultation in separate categories at the national and district levels\(^1\) in the Act was undoubtedly a wise one. When dealing with wages and conditions of service, the atmosphere of the negotiating table is quite different from that which exists when advisory matters are being discussed. The essence of national wage negotiations is caution and "bluff". The scope of consultation, as defined in the Act, demands unstinted co-operation and absolute honesty. Thus, it would have been most unwise to have expected those same Board and trade union officials who had indulged in arduous negotiations at a national level to have used the same machinery for aims which require the utmost co-operation. But the divorce between negotiation and consultation at the national level/\(^1\)

\(^1\) The consequences of this separation at the undertaking level are discussed below, page 548.
level was not complete. Originally the Government had proposed that each Electricity Board would have responsibility for entering into arrangements with the appropriate organisations for advisory council matters. Strong pressure was put on the Government by some of the larger trade unions to place entire responsibility upon the Central Authority for determining which unions should be consulted. They argued that the trade unions had fought for the principle of national negotiations over many years, and having secured the acceptance of the principle in the industry's negotiating machinery, they won their claim to have it accepted in the sphere of consultation. Later on in this chapter we shall observe that local committees enjoy an important place in consultation; but we must bear in mind that their freedom of action is limited by the process of selection which has gone on at a national level. By a happy accident, the larger unions found an ally in the person of Lord Citrine, the first Chairman of the B.E.A., and the trade unions selected as fit to join the new N.J.A.C. bore a striking resemblance to those selected for the negotiating machinery. It might be argued that the N.J.A.C. could have brought in a wider range of trade unions; on the other hand, there can be no disputing the administrative convenience of the present arrangement. Nor can there be any doubt that, for those trade unions selected, trade unionism has been given a valuable part to play at the centre of the industry's affairs.

Lord Citrine himself has played an active role in the setting up of the N.J.A.C. and its subsequent decisions. He has stated on several occasions that he regards the development of consultation and consultative machinery in the Electricity Industry as being particularly important, especially with regard to efficiency. His record in this matter is certainly an honourable one. As long ago as 1927 he was writing (Walter Citrine: "The Next Step in Industrial Relations"): "The trade unions are pursuing logically and consistently the line of policy they/"

1. The exclusion of the N.U.P.E. from the advisory machinery was ungenerous. The big rival unions which had kept the N.U.P.E. out of the negotiating machinery would have lost nothing by permitting their small rival to sit round a table to discuss such uncontroversial matters as safety, health and education. Even this inconspicuous right to participate in the affairs of the industry has been denied to the N.U.P.E."
they have pursued from their earliest days. History attests the fact that the main object of the unions has been in the past to get the best out of the existing system. Unions should actively participate in a concerted effort to raise industry to its highest efficiency by developing the most scientific method of production, eliminating waste and harmful restrictions...and promoting the largest possible output so as to provide a rising standard of life and continuously improving standards of employment...Not only do unions claim to be consulted about the application of rationalisation proposals to the concrete problems of industrial organisation, but they have a positive contribution to make in developing them over the whole field of production."

Speaking at a conference of Power Station Superintendents in February, 1949, Lord Citrine said of joint consultation: "The main purpose will then be to evoke from the workers constructive contributions as to how the industry is to be made more efficient, how it is to provide a better public service, and how both sides can pool their brains for the common good...This new development is going to be a real test of the trade union movement's claims. I do not in the least wish to imply that I have any doubts about the result. The new right of consultation means the trade unions are up against the need for doing the things they have been claiming the right to do...We have a right to say to the trade unions, 'This is a joint affair and you have got to think more in terms of the whole industry and its problems and give us your constructive help to solve those problems'."

But, as Lord Citrine went on to point out to his audience of superintendent engineers, "questions of management in the proper sense must rest where they are now. All through the negotiations leading up to the establishment of the N.J.A.C., I made it clear that the functions of this machinery were advisory in character and not executive. That is to say they could give their advice and their opinions, but the application of any conclusions reached were the functions of management, and management must have the right to say whether it accepted the advice or not."

In fact, however, Lord Citrine did much to strengthen the N.J.A.C. machinery by..."
other means. The trade unions had made it clear that they did not want this machinery to be just a council which passed pious resolutions with no power behind them. Lord Citrine, therefore, ensured that his representatives on the N.J.A.C. were men of high standing who carried with them the authority for action, i.e. Chairmen of boards, and the entire membership of the B.E.A. Having himself agreed to a N.J.A.C. resolution, the Chairman of an Area Board would be in a strong position to go back to his Area Board and persuade it to implement the recommenda-
tion. Although these boards are not, of course, automatically bound by the decisions of their Chairman, and usually insist upon hearing the arguments and merits of a question, this high level representation upon the N.J.A.C. brings "advice" very close to "execution". Similarly, Lord Citrine has impressed upon the trade unions the need for high level representation from their side.

The functions of the N.J.A.C., as we have seen, are little more than a repet-
tion of Section 53 (b) of the Act, and there is no very precise criterion of what falls within the scope of council deliberations. The question of "efficiency", for instance, affords many possible interpretations. In practice, the N.J.A.C. is learning its functions by trial and error rather than by prescription. Safety, health and education offer little difficulty, but with regard to the more loosely worded phrases among the N.J.A.C.'s functions, Lord Citrine has admitted that "it is utterly impossible for anybody to see at this moment what matters are of 'mutual interest' to the trade unions and the Electricity Boards. We know of some things that are of mutual interest, but it is quite clear that as time goes on broadening conceptions, arising out of our activities in generating, transmitting, and distributing electricity, will show us there are other matters we had not thought of in the beginning...What about efficiency in the operation of the services of the Boards? You can define what efficiency means in regard to mechanical problems, but where human beings are concerned, who is to gauge what is efficiency and what is not? We have refused to attempt to do so in advance, but we have established an Efficiency Committee as part of the national advisory council."
Lord Citrine's dilemma is perhaps not so great if we do not attempt to define "efficiency" so generously. Restricted to mechanical and technical matters, the consultative machinery can do much to improve efficiency, although its main inspiration must be drawn (as the Whitley Reports indicated) from the workshop level. Lord Citrine's "Efficiency Committee", for all its high-sounding title, is merely the apex of the industrial pyramid. But when we extend our definition of "efficiency" to what Lord Citrine calls "human" problems, we begin to impinge upon the rights and privileges of labour. At this point we pass over the boundary which divides the consultative from the negotiating sphere of operations. To give a particular example, the N.J.A.C. Efficiency Committee can send a Productivity Team to the U.S.A. But the N.J.A.C. Efficiency Committee cannot hope to secure the implementation of any findings unacceptable to the workers, however greatly efficiency would be increased.

The N.J.A.C. at its second meeting on 20th May, 1949, resolved that District J.A.C.'s "should be deemed to be established on the 1st June, 1949, and should hold their inaugural meetings before the 30th June, 1949." These district councils cover the area of an Area Board and Division, and consist of a maximum of 18 members (9 from each side), the same trade unions being represented. The subjects dealt with by the District Council are, on a district scale, the same as those within the scope of the N.J.A.C.; "provided that the District Council shall have regard to any recommendation which may have been made by the N.J.A.C." They are "to consider any matters that may from time to time be referred to the District Council by the N.J.A.C. or other appropriate authority for consultation, advice or recommendation" and "to make recommendations to the Electricity Boards or to the N.J.A.C. on any matter within the purview of the District Council".

Perhaps the most important duties of the District Council lie in their relationship with local committees. It is at the local level, rather than the National or District level, that the actual workers (manual, technical, clerical) can be brought into contact with management, and the day-to-day experience of the workers/
workers can be utilised, as Whitley had envisaged, in such matters as efficiency, safety and health. Hence, the constitution of District Councils makes the following provision:

Section 3 (ii) (a) to define the areas or spheres of Local Advisory Committees to be established in the Area so as to secure convenience of administration and adequate representation of the Electricity Boards and the employees in the various sections of the industry;
(b) to establish Local Advisory Committees for the areas or spheres defined under Clause 3 (ii) (a) hereof;
(c) to make regulations for any election or other matter for which such regulations may be required by the constitution of any Local Advisory Committee and to give advice and assistance to Local Advisory Committees where necessary in connection with the exercise of their functions;
(d) to refer to any Local Advisory Committee any matter in relation to the subjects aforesaid that may seem to the District Council appropriate to be considered by such Local Advisory Committee;
(e) to consider the minutes of and the reports and recommendations made by Local Advisory Committees within the Area concerning matters within the purview of such committees and if the District Council think fit to make recommendations thereon to the Electricity Boards or to such Local Advisory Committees or to the N.J.A.C. as may seem appropriate."

The local committees themselves were to consist of the members of the Works Committee (manual workers), representatives of technical, clerical and administrative staff (elected by ballot on similar lines to manual workers) and representatives of the Electricity Board. The Chairman was to be a Board representative, and the Vice-Chairman a trade union representative. Candidates for election as clerical, administrative and technical staff representatives must be members of a trade union included in the National Agreement of 1st January, 1949. The clauses relating to procedure follow the pattern of the Works Committee constitution, with the exception/
exception of the Clause which states that decisions shall be reached "as far as possible by general agreement and shall be so recorded". Local committees must meet not less frequently than once in every two calendar months; special meetings must be called within two days of the receipt by the Secretary of a written request from the Chairman, Vice-Chairman or any members specifying the matters which it is desired to bring before the meeting.

In the Edinburgh Area, committees have been set up at Portobello (the Portobello Local Advisory Committee, catering for the Division employees) and at Dewar Place (the Edinburgh Sub-Area Local Advisory Committee, catering for Area Board employees). I attended a meeting of the latter committee on 21st February, 1952. The meeting was held in the Manager's office and preceded a meeting of the Works Committee. This timing was not accidental. It is the policy of the management to hold the non-controversial, advisory meeting in an atmosphere of tranquillity, and then proceed to the more lively Works Committee meeting. If the reverse order were taken, the passions aroused in the Works Committee might endanger the harmony required for the L.A.C. meeting. The employees were represented at this meeting by the Works Committee personnel (seven representatives), clerical and administrative (2) and technical (2). Apologies for absence were intimated on behalf of one technical and one clerical and administrative representative.

The first item on the agenda concerned a portable hand driven winch. At the previous meeting the Construction Engineer had been asked to draw up a design for a winch to alleviate the physical burden of lifting heavy objects on to lorries at Dewar Place. The plan was passed round and severely criticised. A lorry-driver present stated that it could not be brought sufficiently close to the lorry. Another representative stated that the Construction Engineer had been too sparing in the materials he proposed to use; something more elaborate was needed if the burden were to be eased. The management representatives (the Manager, and four senior officers on his staff) did not venture any support for the design, having heard the workers' criticisms. The Chairman (the Manager) intimated, in fact, that he shared the/
the workers' dislike of the proposed winch, and he suggested that the Construction
Engineer should produce something better for the next meeting. The discussion was
an excellent example of how the workers can usefully contribute to "efficiency"
insomuch as it relates to machines. Some of the Board's representatives clearly had
little idea as to what the design involved. The Construction Engineer, who might
have "sold" his plan to the Manager in the absence of any informed criticism, found
himself compelled to withdraw it in the face of well-reasoned and well-stated
opposition.

"Safety" was covered by two items on the agenda, one relating to underground
cables and the other to portable ladders. These recommendations had come from the
N.J.A.C.; the D.J.A.C. for South East Scotland had recommended their application in
this area, and the remits were now submitted for the consideration of L.A.C.s. The
former called upon Electricity Boards to maintain full and accurate records of
underground cables as "the best means of ensuring the safety of employees working
on such cables", and this was welcomed on both sides by the Edinburgh committee.
The second recommended that all portable ladders at sub-stations should be of wood,
and as short as possible. Furthermore, these new portable ladders should be treated
with clear varnish and should not be painted. Existing ladders which have been
painted should be scraped and treated with clear varnish. These wooden ladders must
be distinguishable from all other types of portable ladders. Although there was
general support for this, one worker suggested that it was a lot of fuss about very
little - especially the suggestion that existing ladders be scraped.

Another item concerned with safety was the "Monthly Review of Accidents". A
table showing details of accidents and injuries sustained was placed before each
committee member. Every accident, however trivial, which had occurred to Edinburgh
employees in the previous month, was recorded in full, and discussion took place
upon each entry.

"Welfare" was covered by discussions upon accommodation and the heating of
offices for the clerical staff at Dewar Place. The Chairman agreed to arrange for
the Architect to look into these matters.
Several items catered for the health of employees. There was discussion upon the work of the Manor House Hospital (run by the Industrial Orthopaedic Society) to which employees subscribed. One employee had criticised the treatment received at this hospital, but his criticism was not upheld. Sickness reports for the previous month were submitted and considered by the Committee. Average man hours lost per week were:

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Staff</td>
<td>1740</td>
</tr>
<tr>
<td>Clerical</td>
<td>148</td>
</tr>
<tr>
<td>Technical</td>
<td>nil</td>
</tr>
</tbody>
</table>

These figures were the subject of some good natured banter, with the technical representatives calling the attention of their colleagues to their superior record.

Under "Any other competent business", the representative from the Consumers' Service Department asked if it were competent to discuss the proposed increased tariffs for the electricity industry in Edinburgh. The Board had recently issued certain statements through the Press which had been widely challenged. Meter-readers were always being asked by the public about the effects of the proposed increases. The Chairman suggested that this was a matter for the Board, and not for the L.A.C. One of the management representatives, however, suggested that it was within the province of the L.A.C. to recommend that people in contact with the public should be briefed in public relations, and should always be able to interpret the Board's policy. A meter-fixer representative declared that he "had been challenged by three wives this week". The Chairman then announced that he intended to rule the discussion out of order, although he had purposely delayed giving this ruling for several minutes. This statement was accompanied by a smile in the direction of the Personnel Officer of the Board, who was attending the meeting in an advisory capacity. This gesture presumably was an intimation to the officer that he would be serving a useful purpose if he communicated this discussion to his colleagues at Headquarters, even though it had not fallen properly within the scope of the L.A.C.
The existence of the L.A.C. side by side with the Works Committee at the undertaking level has led to some duplication of functions. The distinction between the two committees is being maintained with difficulty, and the Works Committee seems to be developing into a manual workers sub-committee of the L.A.C. (which, as we have seen, is the consultative body including all grades of staff).

It might be argued that the case for the separation of negotiating and consultative machinery - valid enough at the national and district level - carries less weight at the undertaking level. Where shop stewards or representatives negotiate at this level they also have an internal knowledge of the operation of the establishment. Representatives of the various groups of workers can be brought together in regular meetings with the management for both purposes. Moreover the two processes are less distinguishable at local than at national level. The national consultative body may discuss a scheme for training and the equivalent negotiating body may deal with the pay and conditions of trainees. A local committee may find the two functions inextricable when it carries out its job of supervising trainees. At national level the introduction of new machinery may be discussed in consultation, and rates of pay for its operation negotiated, but when the new machinery is introduced into an undertaking, how to operate and what rate to pay may be inseparable questions. Another factor is that workers tend to be confused by a multiplicity of committees within one undertaking - we have seen the confusion prevailing on this matter in the coal industry - and employees in the electricity industry have a very hazy idea as to the difference between the Works Committee and the L.A.C. It is this ambiguity which has led to some duplication of activities.

Against this, however, it is desirable that consultative committees should include all grades, and if committees are to be given functions in connection with the negotiating machinery (which is necessarily different for the different grades) this all-embracing membership becomes impossible. And the experience of Joint Industrial Councils points overwhelmingly to the fact that negotiation frequently drives/
drives out consultation where there is only one procedure for both purposes. This argument is, in my opinion, decisive, and it applies to the undertaking level just as strongly as to the higher ranges. If it is accepted, however, and separate committees or procedures for negotiation and for consultation are continued at the undertaking level, it may be an advantage to keep them in close contact. In the coal industry, for instance, the exclusion of all wages matters from the province of the colliery committees and their allocation to the union machinery alone makes this contact more difficult.

Close contact is achieved in the South East Scotland electricity undertakings, and a certain amount of overlapping and "untidiness" is not too high a price to pay. There is a compromise between the twin extremes of complete separation and complete integration of the negotiating and consultative functions, and although it leads to considerable difficulty in discerning the principles behind the working of the machinery, it seems to operate successfully on the whole.

2. Under Section 7 of the Police, Factories, etc. (Miscellaneous Provisions) Act, 1926.
CHAPTER VI

Welfare

In the early days of the Edinburgh Electricity Undertaking, a narrow view was taken of the scope and purpose of welfare amenities for employees. Welfare was regarded as being limited to a few measures for the convenience and comfort of workpeople. Certain statutory requirements had, of course, to be fulfilled. Minimum standards were laid down for temperature, ventilation, sanitation, cleanliness and space per worker, although conditions in the Electricity and Supply Industry were usually in advance of these statutory requirements. During the First World War, additional compulsory welfare measures were introduced under Orders issued by the Home Office. In addition, the Home Office and the Welfare Department of the Ministry of Munitions provided industrial undertakings with advice and assistance. Although the activities of the Welfare Department of the Ministry of Munitions ended shortly after the war, the Home Office continued to encourage industry to introduce or extend voluntary welfare work.

"As industry becomes every day more mechanised, standardised and repetitive, the need for welfare work, that is the humanising of conditions of employment, becomes more necessary."

The scope of welfare was widened to include any arrangements of working conditions, organisation of social and sports clubs, and expenditure designed to contribute to the workers' health, safety, comfort and recreation.

Wartime activities had demonstrated that welfare was not merely of value during exceptional circumstances, but it could make a useful contribution to industrial efficiency.

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2. Under Section 7 of the Police, Factories, etc. (Miscellaneous Provisions) Act, 1916.
exceptional circumstances, but also that under normal conditions it could make a useful contribution to industrial efficiency.

"It is one of the beneficial legacies of war-time experience that there is a more widespread and intelligent appreciation of the social and economic importance of factors which diminish fatigue and enhance the fitness of the worker and improve the amenities of the workplace."  

In Edinburgh, although little provision had been made for the comfort of the workers in the design and construction of the Dewar Place and McDonald Road Stations, there was some attempt to provide amenities when the Portobello Power Station was built. The central annexe (which lay between the Boilerhouse and the Turbine-house at Portobello) was built to contain pipes, feed pumps and tanks, but it also housed mess rooms, lavatories and locker rooms for the workers. The fact remains, however, that technical considerations completely determined the layout of the buildings, and the provision of accommodation for plant was the purpose of the station buildings. As far as the accommodation of the workers was concerned, one feels that the designers put aside any such idea as unimportant. From the engineer's viewpoint, this was no doubt true; whereas machinery must be properly constructed and housed or it will not work, the human factor is more adaptable.

It might have been expected that improved welfare facilities would have played a prominent part in the Whitley policies for promoting industrial peace after the war. The essence of Whitleyism was the creation of those material and moral conditions in which industrial harmony could prosper. In this sense it was more positive and idealistic than previous industrial policy (e.g. the compulsory arbitration of the Munitions of War Acts) which had aimed merely at averting disputes. Another feature of Whitleyism which justified optimism was that it was designed to secure a "permanent" improvement in the relations between employers and workmen. Much of the discussion on improved industrial relations which had taken place during the war had revolved around ad hoc solutions to temporary problems. The Commission of Inquiry into/  

1. Committee on Industry and Trade: Survey of Industrial Relations, p. 28.
into Industrial Unrest, for instance, had been concerned with little more than the remedying of a war-time situation. Whitleyism, however, had looked forward to continuous consultation on the "many questions closely affecting daily life and comfort" in industrial undertakings.

The Whitley machinery established in the Electricity Supply Industry in 1919, although more successful than that in many other industries, concentrated largely upon negotiating questions and neglected such positive functions as the improvement of workers' welfare.

It was left to the managements of individual undertakings to introduce the welfare facilities which they considered necessary. In the Edinburgh Undertaking, expenditure on amenities for the workers required the approval of the Electricity (later the Electricity Sub-Committee), and the minutes of this Committee in the inter-war period provide evidence of considerable reluctance to approve such expenditure. It was only with difficulty, for instance, that the Committee was persuaded to buy an additional fifteen workers' lockers for the Portobello Station in 1924. The provision of extra toilet accommodation at Dewar Place and Portobello was first requested in 1932, but it was not until March, 1935, that expenditure was approved. It might have taken longer if it had not been emphasised that separate accommodation was needed for the female staff, and a tour of inspection by councillors in February, 1935, expressed concern at existing conditions.

In June, 1932, the Electricity Sub-Committee agreed to provide accommodation free of cost for a canteen. Electricity provided for cooking at a nominal cost, and a grant of £25 was made for the purchase of the necessary kitchen utensils and crockery which were thereafter maintained by the employees. It was suggested that the men should elect a committee to run the canteen and employ a man to cook for them. The Engineer and Manager reported to the Sub-Committee on 8th July, 1932, that

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the men were not willing to employ anyone, and he suggested that the men should simply be supplied with hot water and heating for any food which they cared to bring with them.

With regard to travelling facilities (and payment of travelling expenses), the management resisted the claims of the workers. In March, 1930, however, they conceded a request made by the Secretary of the N.U.P.E. that a bus be provided for workers on Sunday mornings. On this morning no public transport was available, and shift workers had to walk, often in inclement weather, from such areas as central and west Edinburgh to the Portobelle Station, starting work at 7 a.m. The Engineer and Manager suggested that a bus be hired from the Transport Department, to run between the Post Office and Portobello. In view of the fact that only eight employees were involved in shift work at this time on Sundays the Sub-Committee was reluctant to accept the suggestion, but it finally agreed on condition that their decision was regarded "as a special case and not to be looked on as a precedent".

The Edinburgh Undertaking showed enlightenment in 1927 by joining the Industrial Welfare Society. The Society had been formed in 1918 by various employers who were of the opinion that the welfare work undertaken during the war by the Ministry of Munitions should be continued on a voluntary basis and should, under peace conditions, be guided by industry rather than by a Government department. The aims of the Society were to retain for industry the responsibility for, and the direction of, industrial welfare work, and to develop the various activities (industrial, educational and recreational) within the scope, in the widest sense, of industrial welfare. It was also intended to serve as a centre for the exchange of views and experiences of the constituent firms. The Society supplied member firms with information about the different phases of welfare work, and discussed with employers the welfare schemes which would be applicable to their own particular works and circumstances. Assistance was given along these lines to many firms in the establishment or development of practical schemes, and the Society undertook to arrange for the services of a professional or other expert to advise its members on welfare matters.
It advocated that in each firm there should be a responsible person in charge of all personnel work, whether a director, manager, or welfare supervisor, and it would recommend persons qualified for positions as labour managers, welfare managers and canteen supervisors. A monthly publication was issued in which articles of general interest to management were a regular feature. Studies were also prepared giving detailed information about specific welfare schemes, including their cost, methods of financing, and regulations which had been found to give good results.

From 1920 onwards, the Society had organised a conference on welfare work, and at more frequent intervals conferences were held for discussion and exchange of experience on special subjects.

It will be noted that the attitude of the Industrial Welfare Society was markedly paternalistic, and its emphasis was upon welfare as an integral part of efficient management. Industrial welfare, it was argued, had a beneficial effect both directly and indirectly upon productive capacity and efficiency; and it also resulted in better health, better adjustment of the worker to his work, greater interest and effectiveness, reduced labour turnover and improved industrial relations.

The Edinburgh Undertaking, however, made very little use of the services of the Industrial Welfare Society beyond the adoption of two of its recommendations. The first was the inauguration, in 1927, of regular lectures on first-aid, and the provision of appropriate books and training manuals. The second was the provision of accommodation for a sports club, the administration of which was left to the employees themselves.

Upon the more ambitious recommendations of the Society - the appointment of specialist/
specialist personnel and welfare officers - the Edinburgh Undertaking took no action, and these proposals had to await the advent of nationalisation twenty years later.

Post-Nationalisation.

The promotion of the welfare of all employees was, as we have seen, a "duty" laid upon the B.E.A. by Section 53 (b) of the Act.

Just before vesting day, steps had been taken by the B.E.A. to ascertain what welfare provisions had been made by the 542 individual undertakings in the Electricity Supply Industry. This was done by means of a questionnaire. The returns were collated and analysed so as to provide an overall survey of the welfare facilities available to the workers immediately prior to nationalisation. The returns showed there were 183 canteens in the industry, providing 20,000 main meals daily. Only 15% of the total employees in the Electricity Supply Industry took a main meal in a canteen on any particular day. There were 73 sports grounds of varying sizes provided by 54 undertakings, and 96 undertakings had provided premises for 107 social clubs. There were 167 sports and social clubs with a total membership of over 52,000, so that almost 40% of the employees in the industry belonged to groups of this kind. Other information gained from the questionnaire included details of the washing and bathing accommodation provided for workers in the industry, details as to locker accommodation, type and quantity of protective clothing issued to various grades of workers and particulars of personal welfare services such as hardship grants and loans, methods of dealing with special problems, transport arrangements, rest rooms, hospital and holiday savings groups. It was obvious from the mass of information available from the returns that it would be impossible as well as undesirable to try and impose a rigid "welfare policy" on the industry. Such a policy would require further investigation, and it would require approval by the N.J.A.C. before it could be implemented. As we have seen, the N.J.A.C. appointed a Welfare Committee to investigate and advise upon such matters, and this committee worked in close consultation with the Chief Welfare Officer of the B.E.A. Within a year/
year of being set up, the Welfare Committee had reported to the N.J.A.C. at great length on such matters as the provision of recreational facilities, model rules for sports clubs, holding of exhibitions of arts and crafts, benevolent funds, canteen facilities, hygiene in canteens, canteen facilities for "small and scattered groups of employees", and the supply of towels.

Meanwhile, the Chief Welfare Officer and the Deputy Welfare Officer were busy (judging from the reports they were also supplying to the B.E.A.) visiting Area Boards and Divisions and other industries with a view to obtaining information on "modern welfare practices in industry generally".

In co-operation with the Chief Engineer's Department of the B.E.A., a paper was prepared on the minimum standards of welfare amenities to be provided in power stations. The paper provided a guide to the type, area and location of the minimum welfare facilities, such as cloakrooms and washing facilities, canteens, recreation rooms, ambulance rooms and committee rooms. The inclusion of the last item as a "minimum standard" is a striking tribute to the importance of joint consultation. This paper was issued to Divisional Controllers and all staff engaged in planning and constructing generating stations.

As a general policy, it was agreed that where there was an established need for recreational facilities at any generating station or other place of employment, financial assistance should be given by the Electricity Boards of an amount equivalent to the subscriptions paid by the employees; that membership of sports and social clubs should be voluntary and open equally to all employees; and that the management of the clubs should be vested in their members. These proposals were accepted by the N.J.A.C. and the B.E.A. in September, 1949.

The N.J.A.C. Welfare Committee's Report on the "Supply, Maintenance and Cleaning of Towels" was accepted by the B.E.A., who decided that individual towels should be issued to their employees as soon as practicable, particularly to those in power stations and other factory premises. Where appropriate, however, alternative provision might be made by means of electric hot-air driers, continuous roller towels/
towels and paper towels for occasional use. The enthusiasm of the Chief Welfare Officer in adopting the recommendations of the Towel Investigators is in marked contrast to the attitude of the Edinburgh councillors who inspected the Portobello toilets in 1955.

In the realm of catering no efforts were spared. Plans were adopted for new canteens, and eating facilities for employees working in isolated areas and on shift work were improved. Packed meals and container services were introduced. On 20th March, 1951, the Welfare Committee recommended reduced meal charges for juvenile employees, and the N.J.A.C. agreed that "all employees in the industry until they reach their nineteenth birthday, provided they are not in receipt of adult wages, should be offered reduced charges for main meals, but not for other refreshments served in canteens". A code of hygiene was issued setting standards of cleanliness in canteens, and of suitable toilet facilities for canteen staffs. A new Area Official was created under the title of "Group Canteen Supervisor", his task being to "improve efficiency and secure economies".

Clearly, Canteen Supervisors could not operate without written guidance, and a "Catering Bulletin" was established in 1950, to be published quarterly to "facilitate interchange of ideas and information amongst canteen supervisors". Approval was given for the publication of a catering manual, to promote "a uniformly high standard of catering throughout the industry, and to assist with the training of canteen staff".

We have travelled a long way since the Edinburgh employees were graciously supplied with hot water and heating for any food which they cared to bring with them!

Recreational facilities were expanded and sports and social clubs were re-organised to give effect to the new loyalties occasioned by the post-nationalisation structure of the industry. In some instances existing clubs merged into one large club covering an Area or a Division, or some form of federation was adopted. Clubs are

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1. This was the outcome of a joint report by the Welfare and Health Committees of the N.J.A.C.
are controlled by the members in accordance with the N.J.A.C. recommendation. For indoor and outdoor games, leagues were established, and inter-district and inter-power station competitions organised. In most of the undertakings under the S.E.S.E.B., the social clubs were small, and there was no provision before nationalisation of any special facilities; employees used public greens, etc., for their activities. Presumably their Scots independence is just as strong under nationalisation as it was previously. According to the Personnel Officer, "there has been no approach to the Board to extend the facilities".

In the Edinburgh Sub-Area, a new Centre has been provided for the sports club. The accommodation for billiards, badminton, meetings, cards, etc., is in the opinion of the men very much better than anything they had before nationalisation.

The B.E.A. became a member of the Industrial Welfare Society, and recommended the Area Boards to follow suit. This liaison has, according to the Chief Welfare Officer, been most fruitful. Assistance was given, with the co-operation of the Electrical Industries Benevolent Association, to employees who suffered financial hardship because of sickness or other misfortune, and welfare officers appointed since nationalisation have given guidance on personal matters such as entry into sanatoria and convalescent homes, visiting dependents, sick visiting, holiday arrangements, private and family problems, and housing difficulties.

One recommendation of the N.J.A.C. (made in 1951 upon the advice of its Welfare Committee) was that long-service awards should be made in the form of gifts to employees on completion of 25 and 35 years' continuous service. These should be gifts to the value of £10 and £20 respectively, and employees would be allowed freedom of choice in the selection of the form of the testimonial.

There seems to be little doubt, viewing the overall picture, that welfare has improved since nationalisation. It may be argued that this improvement has only been achieved at the expense of the consumer, who is now confronted by a monopoly and is powerless to resist the tariffs levied by the Electricity Supply Industry. In the days of the municipal undertaking the councillors were closely in touch with their electors, and they sought to achieve a balance between the claims of the workers/
workers under the jurisdiction of their committee and the vigilant citizens of Edinburgh who elected representatives pledged to keep down the cost of electricity. It may be argued that the councillors' sensitivity to public opinion made them insensitive to the claims of the workers, although the record of Edinburgh with regard to welfare amenities would have compared favourably with other undertakings at that time. Nevertheless, the fact remains that the approach of the old Edinburgh Electricity Sub-Committee towards welfare matters was cautious. Since nationalisation this close, day-to-day unitary control has vanished, and the Chief Welfare Officer reigns over his own little kingdom. Individual undertakings no longer ask: will our customers stand for this? They ask instead: is this expenditure covered by such-and-such a regulation?

As far as the workers within the industry are concerned, however, there is no doubt that welfare has improved. This is hardly surprising when we recall that the workers, through their joint consultation machinery right up to the level of the N.J.A.C., are themselves active in recommending improvements. Indeed, one criticism by a member of the B.E.A. is that the N.J.A.C. has been used almost exclusively to secure welfare benefits for the men, whilst suggestions by the B.E.A. as to corresponding concessions by the men in the sphere of efficiency have met with a lukewarm reception. Nevertheless, the B.E.A., as we have seen, has accepted most N.J.A.C. recommendations.

In the sphere of environmental welfare minimum standards have been laid down for future power stations, although clearly little can be done with existing stations. There have been minor improvements, however, in physical amenities like canteens, mess rooms, washing accommodation, toilets, and recreation rooms in the Edinburgh Sub-Area and at Portobello.

In the sphere of sporting and social welfare amenities, the management has shown greater willingness to provide facilities than before nationalisation. The fact that some Scots employees have been unwilling to request improvements does not detract from this more enlightened attitude on the part of management.
As to personal welfare services, our assessment must be more cautious. Such things as benevolent funds, savings groups, holiday clubs, sick visiting and the visiting of widows and orphans of deceased employees - all these services still depend largely upon the initiative of individual managers and station superintendents. In some stations an individual knows that if he is in personal difficulties he can have a private talk with the station superintendent, with the knowledge that he will receive sympathetic advice and help, whilst in other stations the employee will be more cautious about approaching the superintendent. Managers have been advised more frequently since nationalisation upon the need for these welfare services and there have been improvements. But generalisation would be dangerous; there were enlightened and unenlightened managers before nationalisation, and there are managers of both types today. We must remember, too, that the British mind - and particularly the Scottish - is sceptical about this kind of paternalism. The Americans, for instance, carry out an extreme form of personal service, which by our standards encroaches far too much in the private lives of the workers.
CHAPTER VII.

The Workers' Security

Superannuation

A Superannuation scheme was introduced into the Edinburgh Undertaking under the terms of the Edinburgh Corporation (Superation) Order Confirmation Act, 1906, and took effect on 16th May, 1907. The scheme was found to be defective, however, from the point of view of actuarial solvency, due to the fact that the rate of contribution was too low, and that the scheme took into account the past service of those who joined, without any equivalent contributions being credited to the fund. Contributions were accordingly amended, and rates were graded, according to the age of those joining the Fund, as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Contribution Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>3%</td>
</tr>
<tr>
<td>Over 25 but under 35</td>
<td>5%</td>
</tr>
<tr>
<td>Over 35</td>
<td>4%</td>
</tr>
</tbody>
</table>

Employees whose salaries did not amount to £150 per annum contributed 3% less than the ordinary rates. The Superannuation allowances were based on the employee's average salary or wage for the five years preceding the date of retirement and were at the rate of $\frac{1}{60}$th of such average salary or wage for each completed year of service, with a maximum of $\frac{40}{60}$ths. The Corporation paid into the Fund the equivalent of the contributions made by the employees, and special contributions yearly over periods of forty years to meet any actuarial deficiency. In the event of employees leaving the service, or dying, his total contributions were repaid to himself or his representatives. The Electric Lighting Committee would also take into account the circumstances of the widow, in the event of an employee's death.

In October, 1913, for instance, it considered the case of the widow of an Arc Light Attendant who had died after 14½ years' service, receiving 27/- weekly at the time of his death. His widow, who had eight children to support, was now receiving only 16/- weekly from the Parish Council. Her husband had contributed £9:10:0d to the Superannuation Fund, but it was decided to repay a sum of £10 to the widow. The same year gratuity of £30 was paid to the widow of the Station Engineer who had died very/
very shortly after retiring through ill-health (due to overwork in the winter of 1912, when extensions were being made to Dewar Place). A gratuity of 15 was paid to the widow of a fitter, although she was not legally entitled to this sum. The Engineer, however, had sent an employee down to enquire into her circumstances, and he reported to the Committee that "she seems to be a thoroughly respectable, hard-working person". In November, 1914, the widow of a Foreman Caulker applied for assistance. Of her nine children, four sons were in the Army, but she was not receiving anything from them. The Committee decided to pay her 12/8d weekly until the War Office made her a "proper allowance".

A problem which presented itself after the war was concerned with tradesmen on standard rates. While it was possible, in the case of an employee who elected to forego the Corporation benefits, to withhold holidays and sickness allowance, it was not possible to exclude permanent employees from the Superannuation Fund. Thus, employees who elected to forego benefits in order to receive the standard rate continued to receive the advantages of the Superannuation Fund. Not only was this unjust, but the administrative work involved in making these distinctions in pay, allowances, and superannuation deductions was a heavy burden on the clerical staff. The City Chamberlain suggested, as a remedy, that deductions for benefits should be made a condition of entry into the service of the Corporation for all tradesmen. The Salaries and Wages Committee refused to accept this suggestion; it resolved that the matter should remain optional, but that the deduction should henceforth be 1d an hour from the standard rate. The Magistrates and Council reversed this decision, and resolved that henceforth tradesmen should be paid the full standard rate without benefits. Petitions from the various trade unions concerned to send deputations to present their case to the Corporation, were rejected in September, 1920. Superannuation Fund rules were tightened up under a further Act passed in 1922, and the discretion of the Undertaking was limited in respect of payments made in excess of legitimate allowances. There was some controversy in 1924 at the time of the retirement of the Resident Electrical Engineer, when it was proposed to pay him a pension/
pension of £750 per annum. Under the Superannuation Fund he was entitled to only £566:6:8d but approval was finally secured for granting him the balance out of the Electricity undertaking's account. This was permitted, it was discovered, under the Edinburgh Municipal and Police Acts.

The passing of the Widows', Orphans', and Old Age Contributory Pensions Act in 1925, led to a revision of contributions and allowances for manual workers. For the purpose of computing these contributions and allowances under the Superannuation Fund the wages of manual workers were to be reduced by 10/- a week (6/- a week in the case of employees in the service at 16th May, 1930).

In July, 1927, a foreman at Portobello Station asked to retire under the Superannuation Scheme, as he was suffering from a cataract in his right eye. He had rendered 30 years' service, and was due to retire at 65 in May, 1928, when his allowance would be 29/6d. Under the Contributory Pensions Act he would also receive 10/- at 65, and the Committee decided to augment his superannuation allowance by 10/- weekly until he became 65. The Treasurer's Committee, however, refused to approve this award, but it finally approved the grant of a lump sum of 30 in view of the special circumstances. At the same time the Committee considered the case of seven employees, shortly due to retire, who were not included in the Superannuation Fund. In the case of two labourers with 6\(\frac{1}{2}\) and 9\(\frac{1}{2}\) years' service respectively, no grant was made. But pensions were granted (calculated on the basis of the Superannuation Scheme) to a gatekeeper with 28\(\frac{1}{2}\) years' service (7/6d weekly), and a Brass Finisher with 14\(\frac{1}{2}\) years (9/- weekly). An Office Cleaner with 27\(\frac{1}{2}\) years' service was awarded 5/- weekly, although she would have been entitled to only 1/4d under the scheme. In 1929, allowances ranging from 3/6d to a clerk of 13 years' service to 7/6d to a driver with 15 years' service were granted to five employees, but no action was taken in respect of a further four employees with less than 10 years' service. None of these employees was in the scheme.

The Superannuation Scheme regulations were cited by the Edinburgh and District Trades and Labour Council in 1927 in an attempt to prevent employees of the Electricity/
electricity Undertaking from carrying out private wiring in the City after hours. The Secretary of the Trades' Council reminded the Committee that the terms of the Superannuation Order defined an officer or servant as being "in the permanent and exclusive service of the Corporation". The Committee agreed that membership of the scheme was invalidated by this part-time work, and a notice to this effect was posted in the department.

Further amendments were made to the scheme by the Edinburgh Corporation Order Confirmation Act, 1930, under which a higher rate of contribution was provided for new entrants. In the case of entrants after 1930, the rate for non-manual workers was 5% of salary or wages, and for manual workers 4½%. The various enactments relating to the Superannuation Scheme were consolidated in 1933 and were contained in the Edinburgh Corporation Order, 1933. Retirement was optional at 60 years of age and compulsory at 65. Under an Edinburgh Corporation Order made in 1935, provision was made for annuities to the widows of retired officers and services. Hitherto, grants had been made largely at the discretion of the Committee; in 1928, for instance, the widow of a fireman (Dewar Place) with 20 years' service had been given a grant of £5 towards the upkeep of herself and five children. The 1935 Order made it possible to pay an annuity equal to one-third of the employee's full superannuation allowance. In respect of this provision, the employee's allowance was reduced by a percentage which depended on the difference between the age of the husband and wife. The arrangement was, however, optional, and employees desiring to take advantage of it were required to give notice during the three months before retirement of their desire to avail themselves of the provision.

The Committee continued to recommend pensions to employees of long service who had not joined the Fund, although the Treasurer's Committee subjected these recommendations to close scrutiny. In 1934, two employees with 15½ and 17½ years' service reached the age limit. A pension was awarded to the former, although he had not/
not joined the Fund, but approval was withheld from the latter employee when it was discovered that he was a former employee of the Leith Undertaking who had once belonged to the Superannuation Scheme but had contracted out. In 1939, a retired watchman with 13 years 6 months' service was granted an ex-gratia allowance of 4/1d weekly.

On 16th May, 1940, the Local Government Superannuation Act of 1937 came into operation, and by this Act superannuation was made compulsory for certain classes of employees. Edinburgh was not materially affected by the Act, as it already had a scheme in operation, but it now had to make arrangements for employees transferring from or to other local authorities.

After 28th May, 1944, new entrants to the service (other than those transferred from other local authorities) were required to contribute at the rate of 6% in the case of non-manual workers and 5% for manual employees.

**Sick Benefits.**

The procedure for the payment of sick benefits in the early days of the Undertaking was to consider each case on its merits. At the meetings of the Committee the Resident Electrical Engineer would recommend whether the employee concerned should be paid his wages in full, or whether he should be given half or two-thirds pay (if any). The Committee was fairly generous towards its senior officials, and usually continued to pay their salaries. In view of the frequent nervous breakdowns and incapacities of the senior engineers, this was only common justice. But in no case would a decision be taken for more than a month at a time. Every individual case was re-examined at monthly intervals. In 1913, however, conditions were put on a more regular basis. Men who had performed satisfactory service for twelve months could be granted three weeks' full pay and three weeks' half pay (the National Health Contributions being augmented up to these amounts). The allowances were paid only to those employees who worked overtime at ordinary rates of pay. This qualification was intended to exclude craftsmen who claimed the full trade union rates (which for most trades included 1½ pay for night-work, and double pay for Sundays and/or...
and holidays). To claim these benefits (as well as holidays) tradesmen were required to work for $\frac{1}{2}$d an hour below the standard rate, although they were permitted to choose whether they would receive the full rate less benefits, or the reduced rate with all attendant privileges.

In July, 1914, the Magistrates and Council resolved that no allowance of sick pay should be granted to an employee where his incapacity for duty was caused through his own misconduct. An employee injured while on duty should be allowed sick pay at the normal rates, and in the event of his incapacity continuing after the specified period his allowance of sick pay would be restricted after the expiry of that period to the amount to which he was entitled under the provisions of the Workman's Compensation Acts.¹

In 1919 an enquiry was held into tradesmen's rates of pay and the value of benefits. It was discovered that there had been an average increase of 100% over pre-war rates. With regard to the value of the benefits, it was discovered that the average period of sickness for each employee was 5 days per annum. In addition, he received ten days holiday. The Average wage of tradesmen was £3:15:4d for a 46 hour week, (1/7.65d an hour). The value of the 15 days was therefore £9:8:4d (.945d an hour), while the Corporation's Superannuation contribution amounted to £4:15:0d annually (.491d). This meant that tradesmen were receiving benefits worth 1.484d an hour, not taking into account the benefit of an "upstanding wage".

In August, 1945, a Sick Pay Scheme was approved by the N.J.I.C. for the Electricity Supply Industry, and it was approved by the Electricity Sub-Committee at its September meeting. The scheme made the following provisions:—

1. (a) Complete one year's continuous service with the undertaker.

(b) Submit himself (if so required) for a medical examination by a registered medical practitioner nominated by the undertaker.

(c) Be recommended by such medical practitioner for admission to the scheme.

Provided that an employee who was in the service of the undertaker on 1st September, 1938/

¹. See pages 220-221
1.59 shall not be required to submit himself for medical examination under sub-
clause (b) and (c).

2. After a medical examination under Clause 1 (b) the undertaker shall inform the
employee in writing whether or not he has been admitted to the scheme.

3. An employee suffering from sickness or incapacity due or attributable to:

(a) his own negligence or misconduct or

(b) an accident not arising out of and in the course of his employment with the
undertaker

shall not be entitled to any sick payment under the scheme. Provided that the
undertaker may at its discretion extend either the whole or any part of the benefits
of the scheme to an employee who is not entitled to benefit because his sickness is
attributable to an accident not arising out of and in the course of his employment
with the undertaker.

4. If an employee is in receipt of compensation for any industrial disease or
accident under the provisions of the Workmen's Compensation Act, 1925, the Employers' Liability Acts or any Acts, amending, altering or affecting these Acts, or at Common Law, the payments made under clauses 7 and 8 hereof shall be reduced by the amount of such compensation.

5. No payment shall be made to an employee in respect of the first three consecutive
calendar days of each period of sickness.

6. No employee shall be entitled to claim benefit under clauses 7 or 8 hereof unless
his sickness is certified by a registered medical practitioner, and a certificate
furnished to the undertaker not later than the fourth day of sickness and at such
other times during the period of sickness as the undertaker may reasonably require.
An employee shall, if required by the undertaking at any time during the period of his sickness, submit to examination by a registered medical practitioner nominated by the undertaker, and in the case of dispute as to the source and nature of the illness of the employee, the matter shall be referred to the Local Medical Referee appointed under the Workmen's Compensation Act, 1925, whose decision shall be final.

7. After/
7. After the expiration of three consecutive calendar days of sickness an employee shall, subject to the provisions of clause 9, be entitled for a period of five weeks to be paid a sum equal to two-thirds of the normal weekly wage ordinarily payable to him during those weeks, excluding any payments in respect of overtime or other additions to the normal wage.

8. After the expiration of the period of five weeks mentioned in clause 7 an employee shall, subject to the provisions of clause 9, be entitled for a period of seven weeks to be paid a sum equal to one half the normal weekly wage as defined and limited in clause 7.

9. There shall be deducted from the payment under clauses 7 and 8 hereof one half of the statutory benefit to which the employee is entitled under the National Health Insurance Acts or any Acts amending, altering or affecting those Acts, or any schedule thereunder.

10. The period of sick pay under clauses 7 and 8 shall be the maximum periods during which an employee shall be entitled to payment during sickness in any one period of twelve consecutive calendar months, commencing on the first day upon which an employee becomes entitled to sick pay under clause 7, and thereafter being reckoned from year to year from the anniversary of such commencement.

11. Any payment under this scheme shall not be an admission of liability under the Workmen's Compensation Act, 1925, the Employers' Liability Acts, or any Acts amending, altering or affecting those Acts, or at common law.

12. This scheme shall come into operation on 1st August, 1945, in all undertakings who do not operate an existing scheme which is more favourable to the employees. Provided that either the existing scheme or this scheme shall be adopted in its entirety and no employee shall be entitled to benefit under both schemes. Provided also that when the adoption of this scheme in substitution for a less favourable scheme involves the termination or variation of any contractual arrangements made with any party other than the undertaker and employees, the undertaker shall have the option of postponing the operation of this scheme for a period not exceeding three calendar months from the normal date of operation.
13. In the event of the passing of an Act of Parliament which makes provision for payments during sickness it shall be competent for either side of the National Council to give notice to the other side terminating the present scheme on the day appointed by the Act for the coming into operation of the statutory scheme.

Operation of the Scheme during the period of the present emergency.

14. If during the period of the present emergency as defined in Section 6, Sub-section 2, of the Special Enactments (Extension of time) Act, 1940, an employee is transferred or directed by the Ministry of Labour and National Service from one undertaking to another or is re-directed or re-transferred to the undertaking at which he was originally employed he shall not for the purpose of this scheme be deemed to have broken his continuity of service with the undertaker by whom he is for the time being employed by reason of such transfer or direction or re-transfer or re-direction.

15. Any payment under this scheme shall be reduced by any monies received by the employee under any scheme made under Sections 1 and 2 of the Personal Injuries (Emergency Provisions) Act, 1939.

Signed: W. Walker, Chairman.
E. W. Bussey, Vice-Chairman.

Having adopted this scheme under the conditions stipulated in Clause 12, the Edinburgh Undertaking observed it scrupulously for the remaining period of its municipal existence. Sometimes this meticulous interpretation militated in favour of an individual employee and at other times against him. In January, 1946, for instance, a motor mechanic asked for sick pay although he had refused to be medically examined as required by Clause 1 (b), and had in consequence been removed from the scheme when it had been implemented in 1945. The Engineer and Manager recommended that this employee be re-admitted to the scheme and paid sick pay in respect of his present illness, but the Electricity Sub-Committee refused to do so.

Post-Nationalisation.

Superannuation.

Superannuation for employees in the industry was dealt with under Section 54 (1)/
54 (1) of the Electricity Act which stated:

"The Minister and the Secretary of State may make joint regulations for all or any of the following purposes, that is to say:

(a) for providing pensions to or in respect of persons who are or have been in the employment of an Electricity Board or a Corporation Council, or persons who have been members of the Central Electricity Board or have been employed by any body to whom Part II of this Act applies or have been employed whole-time for the purpose of administering undertakings or parts of undertakings of authorised undertakers, but who have not been taken into the employment of an Electricity Board as aforesaid;

(b) in the establishment and administration of pension schemes and pension funds for the purposes of the foregoing paragraph, for the continuance, amendment, repeal or revocation of existing pension schemes relating in whole or in part to the like purposes and enactments relating thereto and of trust deeds, rules or other instruments made for the purposes thereof for the transfer in whole or in part, or for the extinguishing of liabilities under any such existing pension schemes, and for the transfer in whole or in part, or winding up of pension funds held for the purposes of any such existing pension schemes, so, however, that nothing in this paragraph shall be construed as authorising the diversion of any such funds to purposes other than those of the foregoing paragraph;

(c) for making any provision consequential on any such provision as aforesaid including provision for the dissolution or winding up of bodies, whether incorporated or not, the continued existence whereof is unnecessary having regard to the regulations.

Where provision is made by any such regulations for the amendment, repeal or revocation of any existing pension scheme or of any enactment relating thereto or any trust deed, rules, or other instrument made for the purposes thereof or for the transfer or extinguishment of any liability under any pension scheme or for the transfer or winding up of any pension fund held for the purposes of any such scheme, the regulations shall be so framed as to secure that persons having pension rights under/
under the scheme, whether such persons as are mentioned in paragraph (a) of the last foregoing sub-section or not, are not placed in any worse position by reason of the amendment, repeal, revocation, transfer, extinguishment or winding up...

(3) Regulations made under this section shall not be invalid by reason of the fact they do not secure that persons having pension rights are not placed in any worse position by reason of any such amendment, repeal, revocation, transfer, extinguishment or winding up as is mentioned in the last foregoing sub-section, but if the Minister and the Secretary of State are satisfied or it is determined as hereinafter mentioned that any such regulations have failed to secure that result, the Minister and the Secretary of State shall as soon as possible make the necessary amending regulations.

Any dispute arising as to whether or not the said result has been secured by any regulations made under this section shall be referred to a referee or board of referees appointed by the Minister of Labour National Service, after consultation with the Lord Chancellor or, where the proceedings are to be held in Scotland after consultation with the Secretary of State, for his or their determination thereon and the decision of that referee or board shall be final. · · · · · · · · · · · ·

(6) Nothing in this section, and in particular nothing in sub-section (2) thereof shall be taken to derogate from the power conferred by sub-section (4) of Section 69 of the National Insurance Act of 1946, to make regulations providing for the modifying or winding up of pension schemes in connection with the passing of that Act.

The Electricity Boards thus became responsible for maintaining the rights of transferred employees to the benefit of superannuation and pension schemes, and for continuing the payment of superannuation allowances and pensions to employees who had already retired. The Electricity (Pension Rights) Regulations, 1948, made under Section 54 of the Act, preserve the pension rights of persons engaged in the industry prior to vesting day who, on or before vesting day, entered employment with an Electricity Board, or who were transferred to an Electricity Board under the Act, and provide for the transfer of appropriate parts of pension funds (e.g. local government/
government superannuation funds) in respect of such persons. Obligations under a large variety of schemes passed to the Boards, and the necessary administrative arrangements were made to meet them. The Electricity (Pension Scheme) Regulations, 1948, also made under Section 54 of the Act, enabled any Electricity Board to establish and administer a pension scheme approved by the Minister of Fuel and Power or the Secretary of State for Scotland, as appropriate, or to participate in any such approved scheme established by another Electricity Board. During 1948 and 1949 the B.E.A. consulted the Area Boards in devising a scheme to cover administrative, professional, technical, commercial and clerical grades. This scheme, which was finally approved by the Ministry of Fuel and Power on 8th August, 1949, provided for the voluntary transfer from existing superannuation schemes and for membership in lieu of preserved pension rights. The scheme was deemed to have come into operation with effect from 15th August, 1947.

Administration of the superannuation scheme is by a Committee who comprise representatives of the B.E.A. and the Area Boards and of the members of the scheme. Additional provisions enabled members to contribute voluntarily for pensions for their widows and payments in respect of children, along the lines of the old local government schemes.

Manual workers were not included, although 70% of the manual workers were covered by pre-vesting schemes of one kind or another. But with regard to post-nationalisation policy, the B.E.A. stated in 1948 that the "extension of superannuation to manual workers generally was one upon which the Authority and the Boards awaited Government guidance".

This has meant that manual workers joining the Edinburgh Electricity Undertaking since nationalisation are without superannuation rights. In this respect they are less fortunate than colleagues whose service was begun in the days of municipal control.

Sick Benefits.

An agreement signed on 20th July, 1949, between the Electricity Boards and the trade union members of the new N.J.I.C., granted improved allowances to manual employees/
employees. Henceforth workers were entitled, after twelve months' service, to a maximum of thirteen weeks full pay, less National Insurance sickness benefit.

Clause 67 provided that

"there shall be deducted from each weekly payment...in consideration of the sickness benefit to which an employee is entitled under the National Insurance Act, 1946, the following amounts:--

(a) in the case of a man (other than a man with a dependent wife) single woman or widow, 18 years of age or over - 26/-;
(b) in the case of a man with a dependent wife - 42/-;
(c) in the case of a man with a dependent wife and child - 49/6d;
(d) in the case of a married woman, 18 years of age or over - 16/-;
(e) in the case of a young person under 18 years of age 15/-."

Apart from other minor amendments occasioned by the 1946 Act, the agreement was very much on the lines of the 1945 agreement. There was the usual clause safeguarding the sick pay schemes of any undertaking which had instituted a scheme more favourable to the employees, provided that whichever was adopted should be adopted in entirety. This did not apply to the Edinburgh Undertaking which henceforth came under the new N.J.I.C. scheme. It must be remembered, however, that the benefit of the new scheme was far greater to employees of those private undertakings which had no previous scheme of any kind. The only completely new clause in the 1949 agreement stated:--

"The foregoing provisions...shall not apply to an employee who is required by the Board, or on medical advice, to absent himself from duty following contact with a case of notifiable disease. Such absence shall be regarded as special leave with full pay, provided that if any National Insurance benefit is payable during such period it shall be deducted from the full pay."

There was one further difference, although it had nothing to do with the substance of the agreement. The name of E. W. Bussey which had appeared on the 1945 agreement on behalf of the workers now appeared on the 1949 agreement as representing/
representing the employers. This former official of the E.T.U. was now "Member for Labour Relations and Welfare" on the B.E.A. A former colleague of his, Mr. F. Foulkes, General President of the E.T.U., signed on behalf of the workers.

Technical engineering staffs were covered by an agreement signed on 17th February, 1950, drafted on similar lines to that of the N.J.I.C., although with more generous allowances. Sick pay was based on length of service as follows:

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<th>Period of continuous service</th>
<th>Period of sick allowance in months At full salary</th>
<th>At half salary</th>
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<td>Exceeding 4 months but not exceeding 1 year</td>
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The usual deductions in respect of the National Insurance and Workmen's Compensation Acts were to be made from the full salary payable during sickness, but no deduction was to be made from an allowance equal to half salary unless the full benefits payable when added to half salary exceeded the amount of full salary. In such cases the amount in excess of full salary was to be deducted. Another clause stated:

"In the case of serious illness, in which a period of sick allowance equal to full salary in excess of a period of benefit under Clause 19 hereof would, by relieving anxiety, materially assist the employee to recover his health, special consideration may be given by the Board."

No sick allowance was to be paid to an employee after the termination of his employment in pursuance of a superannuation or pension scheme.

A clause which did not appear in the manual workers' agreement extended a further privilege to technical engineering staffs:

"If an employee is sick during his annual leave and submits to the Board at the earliest practical date a medical certificate to that effect, the period of sickness shall be reckoned as sick leave and not annual leave."
The greater privileges accorded to technical staffs were matched, however, by additional safeguards by the Boards against abuse. Clause 21 stated:

"If it is reported to the Board that an employee who is receiving sick allowance has failed to observe the provisions (of this agreement) or has been guilty of conduct prejudicial to his recovery, and the Board are satisfied that there is substance in the report, the payment of sick allowance shall be suspended until the Board have made a decision thereon, provided that before making the decision the Board shall advise the employee of the terms of the report, and shall afford him an opportunity of submitting his observations thereon and of appearing, or being represented by the Board. If the Board decide that the employee has failed without reasonable excuse to observe the conditions of this clause, or has been guilty of conduct prejudicial to his recovery, then the employee shall (subject to the provisions of Clause 45) forfeit his right to any further payment of allowances in respect of that period of absence."

A similar agreement was negotiated by the N.J.C. for Administrative and Clerical Grades.

1. Relating to appeals to the D.J.B. and N.J.B. in case of dispute.
CHAPTER VIII.

Education and Training and Promotion Policy

Standards of education and training for electrical engineers were laid down, from the earliest days of the industry, by the Institution of Electrical Engineers (formerly the Society of Telegraph Engineers), although the means by which individuals achieved those standards have varied considerably. The creator of the Edinburgh Undertaking, Sir Alexander Kennedy, was a university graduate, but his senior assistants and successors were more frequently men who had risen from the workshop, assisted only by a night-school education. A recent president of the Institution, Sir Arthur Fleming, C.B.E., M.Sc.Tech., D.Eng., F.C.G.I., M.I.Mech.E., F.Inst.P., is a good example of the early era of the "practical engineer" who qualified the hard way. Starting as a switchboard attendant, he moved to a job making instruments, and in this way gained a wide and varied knowledge of electrical engineering. He gathered his theoretical qualifications en route at evening classes.

In May, 1871, the Society of Telegraph Engineers had been formed as a voluntary association. Its founders had been encouraged by the success of the British Association of Gas Managers and Engineers (later the Institution of Gas Engineers) which had been formed in 1863. In 1860, the name of the Society was broadened to the "Society of Telegraph Engineers and Electricians", and its aims were defined as "the general advancement of electrical and telegraphic science and more particularly for facilitating the exchange of information and ideas among its members." The rapid growth of industry during this period made it necessary for the Society to turn its attention to the supply of trained men, and to such problems as professional conduct and standards. In 1888, it became the Institution of Electrical Engineers and in 1921 was granted the Royal Charter of Incorporation. The Institution did not disdain to popularise the use of electricity among the public, and it held a series of exhibitions. The Edinburgh Electrical Exhibition of 1890 was overwhelmingly successful; not only did it indicate the intense curiosity of the general public towards this new form of power, but it delighted many eager schoolboys who were to be/
be the industry's future recruits.

Prominent members of the Institution were closely concerned with the establishment of the City and Guilds of the London Institute, an organisation which rapidly assumed national importance and was connected, in 1885, with the new Heriot-Watt College in Edinburgh. The birth of the C.G.L.I. dated from 1st November, 1878, when a lecture was delivered in London by a distinguished electrical engineer, Professor W. E. Ayrton, under the title "On the Improvement Science can effect in our trades and in the condition of our workmen". The first course held by the C.G.L.I. started in January, 1880, and was attended, as Ayrton later reported, by three students - "a little boy, a grey-haired lame man, and a middle-aged workman with emphatic, but hazy notions about the electric fluid". But by 1882 Ayrton was able to report: "For the last two years education has been given in a more or less hand to mouth fashion in small temporary rooms rented in Cowper Street. The education has necessarily been fragmentary from the absence of space, and especially from the absence of a sufficiently large teaching staff, but we venture to think that the men attending the laboratory courses here have been able to gain much of professional value to them. And we are led to this conclusion because some hundreds of men, after their days' work in electric-light factories or instrument-makers' workshops, have thought it worth while to come regularly night after night."

Ayrton/

1. Another distinguished educationalist, Professor Perry, has given us a glimpse of the enthusiasm of this era in a contribution to "The Electrician" (18th November, 1906): "I sat in 1886 beside Professor Ayrton at a meeting of the Institute...in that pioneering time, mere living was delightful. The times of Cortez and Pizarro, the times of Renaissance in the Rucellai Gardens, the times of the French Assembly before 1789 - in not one of these, with the exception perhaps of the last, was there such exuberance of spirits and enjoyment of life as there was among the electrical pioneers of 1878-1884. Many Inventions were tried, found successful, patented and the patents dropped because there were so many other interesting things to attend to - things far more enjoyable than any that money could buy; there was the glorious medley of invention, theory, calculation and design, and experiment all the time."
Ayrton was sceptical, at this stage, of the value of national examinations, in spite of his academic background as a professor at the Imperial College of Engineering of Japan, and later in London. He told the Society of Telegraph Engineers and Electricians at a meeting on 26th November, 1885:

"We are cursed with a sort of Chinese mania for examinations. I can see to what that mania will lead, because I have seen Canton myself where long ranges of examination-cells, in which the examinees are separately imprisoned to prevent their copying, show to what an absurdity this national examination may be brought." But the tide was running against Ayrton's viewpoint; in November, 1908, a committee was appointed to consider examinations as a qualification for membership of the Institution. In 1911 it was decided that there should be examinations as part of the qualification for admission to the class of Associate Member and Student, although for older men with experience (who could not be expected to take examinations) admission without examination was permitted. This membership was designated "Graduate" class.

In the Edinburgh area, the needs of aspiring electrical engineers and tradesmen were met by the Heriot-Watt College. Like the C.G.L.I., this college was already flourishing by 1887 when the Technical Institution Act empowered municipalities to raise a penny rate for the building and equipping of technical schools. The democratic ancestry of the Heriot-Watt College is particularly interesting; it was catering for the needs of Edinburgh mechanics and tradesmen for many years before it turned to the education of professional engineers. In 1821, the Edinburgh School of Arts had been founded "for the better education of the mechanics of Edinburgh in such branches of physical science as are of practical application in their several trades". According to Dr. W. Chambers, it was the "precursor of every mechanics' institute in Great Britain". At first located in Niddry Street, it moved in 1851 to a house in Adam Square where it was re-designated, in memory of James Watt, the

1. 50 & 51 Vict. c.64.
2. Scotsman, 23rd January 1873.
the "Watt Institution and School of Arts". In 1871, it moved to new premises in Chambers Street. Shortly after this, it was suggested that funds from the "George Heriot Trust" be made available to the school, on the grounds that public education was now catering for the poor children for whom the fund had been intended. This move met with considerable opposition. The Governor of Heriot's Hospital (Baillie Lewis) declared that it would be alienating funds from the original purposes of the founder - "the education of poor fatherless bairns". Allocated to this mechanics' institute, the funds would merely be "frittered away".² Although the Principal of the University, Sir A. Grant, expressed cautious support, he was most anxious that the new college should not overlap with the university. Among other prominent citizens, Mr. Lessels argued that there was "little proof that the School of Arts had accomplished what was wanted for the instruction of the mechanic".² Mr. William M'Crie feared that the promoters of the scheme had "assumed a demand which did not exist. Such a desire was confined to a very limited section of artisans...As regarded the great mass of Edinburgh working men the desire had to be created rather than supplied."³ Mr. M'Crie had supported workmen's halls in the Leith Walk and Greenside Districts, and at Stockbridge and Fountainbridge, hoping to encourage the workers to attend classes by providing bagatelle and billiard tables to sugar the pill. But the workmen had spurned the instruction and concentrated on the bagatelle and billiards. Nor had the unfortunate Mr. M'Crie enjoyed greater success with education for the working girls. Of the girls who had attended, none had shown interest in the useful classes, but "all were able to go through a quadrille and the half of them were able to waltz". Mr. M'Crie's melancholy conclusion was that there was no future for a Heriot-Watt Technical College.

Dr. Stevenson MacAdam leaped to the defence of the Edinburgh working man. In his long connection with the School of Arts he could state that "there was not that utter want of sympathy with science among the working classes that had been referred to by Mr. M'Crie. "He had been brought into contact with many thousands of the working/

1. The Scotsman, 23rd January, 1875.
2. Ibid.
3. Ibid.
working classes of Edinburgh during the period of his tuition, and there was no greater desire for knowledge among the students in the university than there was among the students of the School of Arts. "They go there for the purpose of learning science as applicable to their several trades and avocations, and generally have to pay for the education they receive...In point of intelligence, in point of attendance and gentlemanly conduct during their attendance, and in their answers to examinations, better students could not be wished for". With regard to the small attendances, the fact was that the number of pupils had been regulated by the size of the rooms. The lecture rooms had been crammed, and in some of the classes students had been compelled to stand during the whole time of tuition. Since the existence of the School of Arts, 20,000 working men had received instruction.

Others were no less vehement in their support for the scheme. Professor Fleming Jenkin, having warned the university not to be jealous, pointed out that we needed schools in which science was taught. "In Edinburgh it is almost impossible for a boy to learn anything that can be called science." But he proceeded, with academic balance, to appeal for a strong practical bias in the training of engineers. In words reminiscent of Ayrton's, he declared that our system of giving education to engineers was superior to the continental; we learned to be engineers by working in the engineers' shops, whilst abroad they attempted to make engineers by teaching them in classrooms. Mr. David Cousin cited "the necessity of scientific instruction if this country were to maintain its high position in the world's competition". 1

Amongst other arguments in favour, one was that such a college would "withdraw the working classes from the evils of the public house", and another, that Glasgow had a technical college and "why leave it to Glasgow?"

In 1885, under a new governing body, the Heriot-Watt College was finally established. Advice was given by Philip Magnus, secretary of the C.G.L.I., in a report to the George Heriot's Trust. Among his recommendations, he was emphatic on the/

1. The Scotsman, 23rd January, 1873.
the need for a new department of electrical engineering, "including the application of physics to telegraphy, telephony and electric lighting". He also pointed out that evening fees should be kept low. With regard to the new day department, "fees should be sufficiently low to bring the advantages of the College within reach of the middle classes". He suggested not more than £8 per annum.

Since that time, the Heriot-Watt College has expanded rapidly. It followed the practice of anticipating national legislation by linking workshop practice with technical training in 1918, before provision for Day Continuation Classes for young people in employment had been placed on the Statute Book. In 1927, the College was re-constituted under a new governing body, including representatives of the university, the Town Council, the Edinburgh Chamber of Commerce and the Governors of George Heriot's Trust. The buildings were extended in 1935 and 1938. In the latter year, satisfaction was expressed in the annual report at the increased activity of the electrical engineering department. For clerical and administrative workers, commercial certificates under the National Committee (Scotland) were instituted.

Entrants to the Electricity Supply Industry direct from elementary schools were dependent upon evening classes for their training. It must be remembered, however, that many apprentices did not attend such classes. Those who did so were given a two-year preliminary senior technical course, followed by three-year courses leading to the Ordinary National Certificate in electrical engineering. By spending two more years at evening classes, the entrant could sit for the Higher National Certificate. The complete certificate thus occupied seven years. Apprentices in various crafts and trades could obtain appropriate C.G.L.I. certificates through attendance at evening classes.

By full-time attendance at the technical college, boys who had left school between 16 and 18 could qualify for their National Diploma. This took two years, and provided the boy with a considerable start in gaining his full professional qualifications.

Entrants to the industry from the universities underwent a course of practical training before securing any of the better posts open to engineers.

The National Certificate Courses (Ordinary and Higher) were more theoretical than craft courses, but their prestige was much higher. This meant that many boys entered for these courses rather than the craft courses, although they were educationally unsuitable. The high "casualty rate" led the I.E.E. to investigate the education and training schemes for electrical engineers. It issued a report in 1944,1 regrouping engineering personnel into three main divisions; craftsmen, technicians and professional engineers.

In the craftsmen group it included chargehands and foremen. These employees did not require academic education but a type of technical instruction which would train their minds to deal with problems encountered in their work, and a "better understanding of the part they play in the functioning of modern engineering organisations". Certificates could be given for craft proficiency. They would be less "academic" than the ordinary national certificate, and better suited to indicate rudimentary technological skills.

At the other end of the scale, the professional engineer "needs an extensive knowledge of electrical technology, resting on a sound training in scientific method and supplemented by a broad margin of knowledge of other sciences and of mathematics, and he must be thoroughly conversant with, although not skilled in, the techniques through which his ideas take ultimate form".

These definitions were straightforward enough and conformed to long established practice. But in attempting to define a new category of "electrical technician" the 1944 report provoked keen controversy. The report was hotly debated at regional meetings of the I.E.E., and some of the most searching criticisms came from members of the Scottish Centre of the I.E.E. The technician was described as coming between the/
the two extremes of craftsman and engineer; he was a person called upon to make decisions which could not be reached completely by scientific argument, and was guided by personal judgement. Although not a chartered engineer he sometimes rose to administrative positions comparable to those held by engineers. He was not a craftsman although he needed some technical skill. More particularly, he "carries out in a responsible manner approved techniques which are either common knowledge amongst those who are technically expert in his branch of industry, or specially prescribed by professional electrical engineers". His work included "use of delicate and complicated instrument, and may also require the intelligent and accurate use of approved methods of calculation... Education must have reached at least (and preferably beyond) that of the Ordinary National Certificate in Electrical Engineering."

In other words, the technician is a man more concerned with how things work than why; he is more interested in descriptive details than analysis. Reading this report one is forced to ask: who exactly is this mysterious technician and where has he been concealed during the fifty years of existence of the electricity industry? Apparently he is someone who set off originally to be an "electrical engineer" (the public's vague conception of this job does not always coincide with the I.E.E.'s rigid professional interpretation) but he lacked the academic interest. Consequently he fell by the wayside, and occupies an intermediate position somewhere in the industry. But he probably still thinks himself to be, and calls himself, an "engineer". Indeed, many senior employees of the Edinburgh Undertaking in former days would have fallen within the definition of "electrical technician" as laid down in this report, in spite of the fact that they enjoyed a status at that time of "electrical engineer" which was never challenged. Such men were responsible for the operation of switchgear, regulation of voltage and frequency, and the loading of plant. In times of emergency they were required to exercise considerable initiative. They would be competent to overhaul all classes of rotating machinery and equipment.

After this report, the I.E.E. went on to discuss in greater detail the...
"Education and Training of Electrical Technicians". A committee appointed for this purpose suggested that they should have an association of their own, for the reading of papers, discussions, meetings, etc. The "Proceedings" of the I.E.E., it was suggested, were too "highbrow". The Ordinary National Certificate curriculum should be modified (hitherto it had been planned to lead up to higher professional examinations) with a less rigorous course in mathematics. After this examination, there should be a more specialised technological course. There would be some transferring each way between craft apprentices and these entrants for technician training. In addition, apprentices should be encouraged in intellectual, social and athletic pursuits; they should form self-governing apprentice associations. There should be debates, dinners, dances, with lots of sub-committees to give members organising experience. Apprentices' hostels, declared the committee, should be introduced where possible.

The discussion by the I.E.E. upon the education and training of technicians covered the period immediately prior to - and since - nationalisation and insofar it was bound up with demarcation problems vis-a-vis craftsmen on the one hand and chartered engineers on the other, it raised many serious issues. The tripartite division involved a "stratification"; entrants would choose (or have chosen for them) one of three categories, within which they would be encouraged to develop their skill and abilities. Thus it would become necessary to persuade students who failed the Ordinary National Certificate course to take a technician or trade course, thereby accepting downgrading. They would nevertheless be required to equip themselves educationally within their own category. But the incentive for study in the past - of the men who had crowded Ayrton's little classroom and flocked to the Heriot-Watt College in its earliest days - had been to get a better job, not to qualify themselves to go on doing the same job better. And as for interviewing boys and sending them off into their appropriate categories, one prominent man in the industry states:

"All lads want to be chartered engineers...it is harsh to stratify them. They don't/
don't contemplate their future as technicians! I tried to become a chartered engineer and failed. I am now a manager - we all become managers in the end. Nobody says "I am an electrical technician". They say "I am an electrical engineer" and if they continue to think they are they will have a good chance of becoming one. You are telling a boy that he may not achieve his goal. No-one knows the capabilities of a youth; he must find them out for himself."

Thus the argument that was raging on the eve of nationalisation was really this: should entrants strive for full professional status, those who missed the goal being left to fill "intermediate" jobs? Or should there be intensive preliminary selection, after which boys should be directed down one of three well-marked routes? The new Nationalised Authority, as we shall see, was to compromise. It was to mark out three different strata, but at the same time leave some scope for vertical movement.

The controversy over technicians was natural, as no well-established tradition of training had grown up. The quarrel over the definition made matters worse. If we can define our terms, as Descartes pointed out, we have solved our problem. But the chartered electrical engineers, in spite of arguments covering many issues of their "Proceedings", (carried on in terminology often very arduous to the layman's eyes) hardly seemed to reach a conclusion as to what a "technician" is and does. If the composition of their committee had included a technician it might have been more useful; but against this, the technician would probably have not answered to the name, and would have called himself an engineer. It might be supposed that, in dealing with the training of craftsmen in the industry, the story would be more straightforward. Craft apprenticeship has an honourable tradition dating back to medieval times, and its organisation was readily transferred to the industries which arose in the nineteenth century. In fact, however, it was generally considered that the Electricity Supply Industry was not a suitable place for the training of apprentices/
apprentices. Basic workshop experience could not easily be given in generating stations which were, by their nature, indifferently equipped with machine tools and workshops, although some undertakings ran their own training schemes. In Edinburgh, it was the practice to employ well-qualified and proficient men, but the management was hostile to the idea of providing training schemes. Rather than train its own apprentices the policy was to recruit them from local engineering firms which were better equipped to give basic training. In the case of jointers, youths would go for five years as a "jointer's mate", and they would be upgraded to jointers after giving satisfactory service.

The only special training provided was occasioned by the circumstances of the first war. The Council of the I.E.E. had suggested a training scheme for disabled soldiers on switchboard work. The course was partly theoretical and partly practical and it was taken up by Professor Frank Bailey of the Heriot-Watt College. The disabled men spent three months at the Heriot-Watt College and a further three months learning at the Dewar Place and McDonald Road switchboards. These trainees were subsequently retained in the employment of the undertaking.

The Edinburgh management also co-operated with the Heriot-Watt and the University of Edinburgh in accepting student trainees from these institutions to work for short periods at a salary of 2:10:0d weekly.

The practice of the Edinburgh Undertaking was to make entry and promotion in the clerical and administrative grades conditional upon success in appropriate examinations. Recruitment was usually at 16, although a proportion of candidates were accepted up to 18. Juniors were encouraged to continue their studies by attending part-time or evening classes in special or general subjects, which might include local government and public administration.

Post-Nationalisation.

Section 2 (2) of the Act (under "Additional Functions of Electricity Boards") stated:

"It shall be the duty of the Central Authority and every Area Board, in consultation/
consultation with any organisation appearing to them to be appropriate, to make provision for advancing the skill of persons employed by them and for improving the efficiency of their equipment and the manner in which that equipment is to be used, including provision by them and the assistance of the provision by others of facilities for training and education. The provision of such training is also covered by Section 55 (b) of the Act, with particular reference to "efficiency in the operation of the services of the Board".

The B.E.A. accordingly established an Education and Training Department under a full-time official responsible to the Labour Relations and Welfare Member of the B.E.A. (Mr. E. W. Bussey, C.B.E.). The first task of this department was to deal with the future position of the staff both in respect of those within the industry and those who were to be recruited to augment the existing technical and skilled labour force. A survey was made of the methods of recruitment of staff, and the facilities for education and training which existed throughout the whole industry before vesting day. The final report of this investigation which was placed before all the Area Boards and Divisions noted that there had been in the past "a great variety of methods and facilities, a prevalent reliance on outside sources for qualified personnel, and a tendency in many quarters to leave the systematic improvement of personal proficiency to the unaided effort of the individual employee". This criticism, with only minor qualifications, could be fairly applied to the Edinburgh Undertaking.

Vocational Training.

One major fact facing the department was the Government's capital investment programme whereby the generating capacity of the country was to be increased by over 8,000 megawatts in the five years, 1948-1952. It was estimated that to man this new generating plant, and to replace wastage, an annual recruitment of 500 mechanical and supervisory grades would be required every year up to 1952. With regard to the manual grades the annual need was estimated to be 5,000. The statistics before the department indicated that there would be little addition to the strength of the technical/
technical staff from those serving five-years' apprenticeships in the industry. The manufacturers' graduate training schemes, from which a steady flow of technical personnel had flowed to undertakings like Edinburgh in pre-war years, could no longer be relied upon as a source of recruitment in face of the requirement for increased production.

1. Graduate Trainees.

A graduate training scheme was therefore prepared for training persons of university degree, higher national certificate or similar standard. The scheme, which was originally designed for the generation side, has been extended at the request of the Area Boards to cover distribution. There were three parallel courses, each of two years duration, in any one of which the trainee was able to obtain good all-round experience in the several branches of the industry, though specialising towards the end of the course on generation, transmission, or distribution. The period of the course could be extended to three years to allow a wider training in all three branches. In accordance with arrangements made with certain large engineering companies, trainees who lacked this experience could spend six months of the training period at manufacturing works. One Edinburgh graduate who spent that part of his training with a cable firm stated: "It gave me a greater respect for manufacturers in general." This liaison between the future managers of a nationalised industry and private firms should prove mutually beneficial.

The scheme is only general in outline; the Education and Training Department has avoided the arbitrary imposition of rigid schemes and recognises that the actual day to day work of training rests in the hands of responsible engineers and managers.

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1. The Education and Training Department of the B.E.A. preserves close contact with the Education and Training Committee of the N.J.A.C. This Committee, which meets about every two months, set up two sub-committees. These were the No.1 Sub-Committee (Engineering), to which was co-opted representatives from the I.E.E., the I.M.E., the Association of Technical Institutions and the Association of Principals of Technical Institutions, and the No.2 Sub-Committee (Clerical and Administrative). The Committee prepared reports to the N.J.A.C. on the Graduate Training Scheme (which was accepted by the N.J.A.C. on 21st October, 1949), the Education and Training of Engineering Apprentices, Form of Agreement for Apprentices, Educational Incentives, Establishment of Spring and Summer Schools, and Training of Junior Clerical and Administrative Staffs.
Let us see how the scheme is implemented at the Divisional and Area level. The Personnel Officer of the South East Scotland Electricity Board, for instance, arranges to contact students who are completing their final year. He points out that engineers are wanted for different branches. Students will be taken on for six months, two months on generation, transmission and distribution respectively. At the end of this period the student is asked wherein his special interest lies. Having selected, say, generation he goes on to complete a further eighteen months' training (making two years in all). The trainee is interviewed by a member of the staff of the Division, subject to approval of his educational qualifications by the Education and Training Department of the B.E.A., and he remains under the direction of a member of the Divisional staff. Arrangements are made for the trainee to obtain experience on all unusual work arising in the station. A record of progress of each trainee in the various departments is maintained, and this record is sent on to the manufacturing firm in cases where the man is undergoing manufacturing training. The three year trainees spend the extra period acquainting themselves with advanced work in all three branches - generation, transmission, and distribution. By the end of this period, they should have an excellent all-round knowledge of the industry, and are the potential top-line administrators of the future. Trainees continue their technical education at the local college on a part-time basis. Instruction on the organisation and structure of the Electricity Boards is provided by courses given on a national scale at either Electricity Hall, Buxton, or Horsley Towers, Surrey. During training students receive £285 for the first year and £600 subsequently.

For engineering students taking full-time courses at universities or technical colleges, who wished to obtain practical experience during vacations, the Education and Training Department has recommended that suitable facilities should be offered in generating stations or on transmission systems. This practice was, as we have seen, already in operation at Edinburgh.

By the end of 1951, a total of 927 graduates had been accepted for the scheme,
of which 254 had been appointed to staff positions in the industry. During 1951 the N.J.A.C. reviewed the Graduate Training Scheme in the light of experience, and it recommended that for trainees leaving universities or technical colleges with the requisite academic qualifications but without previous practical experience, the course should be extended by six months to give them additional experience in basic-training workshops. Many ex-service graduates had received such experience in H.M. Forces, but with the decline in the number of such candidates there had been an inflow of graduates lacking such practical experience. The N.J.A.C. recommendation was accepted by the B.E.A. and Area Boards.

2. Student and Craft Apprentices.

The next step facing the Education and Training Department and the N.J.A.C. was to deal with the progress of the employee in the industry itself - to provide facilities for student apprentices (youths studying for the National Certificate) and craft apprentices. Shortly after vesting day Lord Citrine had stated:

"The aim and purpose of this industry is to see that those who have the ability and are willing to take advantage of the opportunities afforded would have such facilities as would permit them to go from the lowest to the highest position in the industry." It therefore devolved upon the Education and Training Department to see that Lord Citrine's promise (made under the terms of the Act) was carried out.

With regard to student apprentices, applicants from 16 to 18 years of age who had left school with the school certificate, the higher school certificate (or its Scottish equivalent) could serve an apprenticeship henceforth of four or five years, during which they were given practical training covering more than one section of the industry. They are encouraged to attend technical classes in preparation for the ordinary and higher national certificates, and if they obtain such qualifications may be transferred to the graduate training scheme. After five years all student apprentices should have reached Higher National Certificate Standard and be in direct line for a junior appointment on the technical staff. A recommendation was/
was also issued to the effect that those manual workers who were in possession of the Higher National Certificate (a few existed throughout the industry) should be promoted, wherever possible, to the technical staff.

Craft apprentices were to begin at school-leaving age and continue for five years. These apprenticeships lead to such trades as fitter (mechanical or electrical), turner, electrician, and meter mechanician. Boys are required to serve a probationary period of from six to nine months, during which they undergo basic wor shop training. One innovation brought about by nationalisation is that the Boards are providing workshops where boys can get a thorough knowledge of basic skills (formerly undertakings did not usually possess such facilities). The work-shop also serves a useful purpose in carrying out a certain amount of maintenance work for power stations in the district. All craft apprentices who joined the industry after vesting day are now being indentured, while juniors who were employed before vesting day and were not subject to an agreement, are to be given certificates at the end of their training to the effect that they have completed a specific period of training. Apprentices would be encouraged to attend technical classes in preparation for City and Guilds Certificates or the Ordinary and Higher National Certificates, and those who made suitable progress could be transferred to the student apprenticeship.

"There will have to be co-ordinated and developing schemes," declared Mr. Bussey at a conference at Magdalen College, Oxford, in 1949, "whereby it will be possible to relate the progress of men from unskilled grades to the higher grades with a clear recognition of the needs of the industry." He went on to qualify this statement, bearing in mind, no doubt, his long experience in the trade union movement. The E.E.A. would be careful "not to overload the industry to the detriment of the skilled men".

The drawing up of the Craft Apprenticeship Scheme involved contributions from all levels. The Edinburgh Sub-Area was particularly active and made suggestions through the L.A.C. to the D.J.A.C. which passed them on in a consolidated form to the/
the N.J.A.C. The final draft of the scheme then underwent the reverse process of approval, the N.J.A.C. submitting it to the D.J.A.C.s with a recommendation that it should be implemented forthwith. The South East Scotland D.J.A.C. formally adopted it in 1951 (although it had been making preliminary arrangements in anticipation of adoption) and called upon L.A.C.s to report annually in September on the practical and educational training of apprentices. L.A.C.s drew up lists of their apprentices, and arranged for interviews with each youth to assess his capabilities, and whether his bias was practical or theoretical. The Edinburgh Sub-Area L.A.C. was able to record at its meeting on 17th May, 1951, that the scheme was fully in operation. Indeed, it was revealed that Edinburgh was doing more in this direction than was required by the scheme. One of the workers' representatives was asked if any provision had been made for garage mechanics. The Chairman (the Manager) replied that there was no special programme for motor mechanic apprenticeships in the scheme, but the employee at Dewar Place who fell in this category would be given an apprentice indenture and would receive the best training which the Undertaking could offer. The South East Scotland D.J.A.C. discussed the various reports from L.A.C.s at its meeting on 4th January, 1952. It was highly satisfied with the efforts of Edinburgh, Fife, Lothians, and Southern Sub-Areas, but noted the omission of any report from Central Sub-Area. However, the D.J.A.C. agreed that it was encouraging that such a real measure of interest was being taken in the scheme, and was satisfied that "a careful and conscientious effort was being made by L.A.C.s to look into the circumstances of, and give advice to, all apprentices". The attempt to "organise" apprentices has not gone uncriticised, however. As one Scottish engineer put it: why apprentice associations? The ambitious ones can become Student Members of the I.E.E. Why hostels? Engineers must stand on their own feet. The gist of this man's argument was that personality and qualifications will show up to the best advantage in slightly difficult circumstances rather than in a completely smooth and easy one.  

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organised system. And a Senior Lecturer of Heriot-Watt College, is of the opinion that the organisation of apprentices (particularly apprentice associations) could be overdone. They ought to gain the wider outlook and experience which could be achieved only by joining clubs and societies in no way connected with their place of employment. This view is a healthy reminder that craftsmen, technicians and engineers are citizens as well, and that the best-intentioned management in the world should not attempt to encompass all their waking hours.

Vocational Training for Other Skilled and Semi-Skilled Workers.

The setting up of workshops made it possible to increase facilities for the training of jointers who had, in the past, been somewhat neglected. L.A.C.s were urged by the D.J.A.C., at its meeting in January, 1952, to give special attention to the training of jointers.

Schemes were also drawn up to provide training for turbine plant operators and sub-station attendants. Although the former scheme has not yet been implemented, sub-station instruction has been provided for trainees (often manual workers from lower grades) to qualify as attendants. The duties involve attending the operation of the sub-station and maintaining the plant in good order, excluding work which lies in the province of craftsmen.

The introduction of a Sub-Station Attendants' Training Scheme into the Edinburgh Sub-Area was a complete change of policy. Hitherto, sub-station attendants had been recruited from men with experience of running electrical machinery. The Area Engineer at Dewar Place (who had previously been employed by the municipality) informed me that the old policy had been more satisfactory, as far as the individual undertaking was concerned. Edinburgh had usually selected ex-Royal Navy personnel with engine-room experience. Since nationalisation the Undertaking was responsible for training its own sub-station attendants, and the requisite qualifications for entry to the course led to controversy with the trade unions. At a meeting of the L.A.C. on 15th March, 1951, a complaint was made that a new trainee had been started who

who had no electrical background. The workers' representatives said that there was a cleaner at McDonald Road who was very keen on advancement and had picked up the routine duties of Sub-Station Attendant. Why could this man not have been accepted as a trainee? The management gave its reply at the next L.A.C. meeting on 19th April. It was very brief and to the point. "It is a question of the most suitable man for the job," stated the Manager, "and it is for the management to decide this." The workers returned to the attack at a meeting on 17th May. They were still of the opinion that the man selected for a sub-station attendant trainee should "have some electrical background" as the post is classified as "skilled operative staff". An E.T.U. member pointed out that the trade union branch always investigate the union standing of any new employee, and that if a man who was not eligible for a skilled ticket was appointed, it would cause trouble. The Chairman (the Manager) agreed that the Union was interested in the maintenance of craft skill and could make representations to the management. It remained, however, the prerogative of the management to select a suitable applicant, and it "must subsequently take full responsibility for any troubles that arise from that appointment whether due to his Trade Union standing, competence or any other cause".

Administrative and Clerical Staffs.

With regard to the administrative and clerical grades one of the first acts of the Education and Training Department was to consult with appropriate professional bodies about educational qualifications to replace the local government examinations accepted by many local authority undertakings, and to be applied to the industry as a whole. In order to give them a variety of experience and a broader outlook on their work, it was intended that, wherever practicable, selected administrative and clerical staff should be moved periodically from one department to another. One practical difficulty in bringing training schemes of these staffs into line with those of engineering apprentices was that deferment was not available from call-up under the National Service Acts as it was for the technical employees. The N.J.A.C. proposed that well-balanced educational courses should be provided for all juniors, including those engaged in shorthand and typing. Selected juniors, after a probationary/
probationary period of employment, should be given a six-months full-time educational course which should include shorthand and typing. The N.J.A.C. also recommended (on the lines suggested by the Education and Training No.2 Sub-Committee) that junior employees wishing to take a professional qualification in secretarial work or accountancy would find a valuable preliminary training in the course of study for the National Certificate in Commerce, and that other employees should also be encouraged to take this course.

The N.J.A.C. scheme provides for the training of fifteen-year entrants over a five-year period, during which they move round different departments.

Further Education: Part-time Day Releases.

Particular attention was given by the Department and by the N.J.A.C. to the question of educational incentives. It was decided that, subject to satisfactory progress, employees under 21 years of age should be given time off to attend technical or commercial colleges for the equivalent of one day a week. Similar facilities should also be granted to older men and women who had studied privately over a period of two or three years and had shown substantial progress in a course leading to a recognized qualification. With regard to fees, half to three-quarters of registration, tuition and examination fees of all employees undertaking courses appropriate to the requirements of the industry should be reimbursed, and assistance should be given in certain cases towards the cost of textbooks and travelling expenses, subject, of course, to satisfactory progress in studies.

The provision to release employees for one day a week has been criticised by a South East Scotland Electricity Board engineer with considerable experience in the activities of apprentices. According to this man, the day is sometimes merely regarded as a holiday. "It might be better if apprentices for the first two years attended night school instead of day school. If a young apprentice will stick two years at night school and is then allowed a day off, he will appreciate it more." Other engineers think that one day a week is reasonable, but they would be opposed to extending it to, say, two days. The argument, which seems to be a strong one, is that/
that an apprentice must have a sense of the reality of practical work, and he must feel that his obligations lie in the workshop. And, in view of the casualty rate for national certificate examinations ("the number who ever achieve this aim is very small" according to the Personnel Officer of the South East Scotland Electricity Board), too generous provision of free time would be open to serious abuse. Finally, there are the arguments of those who are suspicious not so much of apprentices as of modern youth, with his propensity to idleness, irresponsibility and deceit. It would be superfluous to repeat these arguments here; they were first used, no doubt, by Adam to chastise Cain.

Residential Courses in Management, Supervision and Human Relations.

Perhaps the most spectacular innovations by the Education and Training Department have been the residential courses and schools on a national basis. In February 1949, the Electricity Hall, Buxton, was opened as a residential training centre, with a weekly average attendance of 48 students. These courses have, in the main, been organised for specific groups of employees such as Power Station Superintendents, Works Committee officials, Staff Committee Officials, and engineering graduate trainees. They included lectures and discussion on the structure and organisation of the industry, the wage negotiating and Joint Advisory Council machinery, welfare, safety, and education and training. Specialist courses have been held on such subjects as protective gear and crack-detection in boilers, and for welfare staffs on canteen supervision. The courses for Power Station Superintendents seem to have been the most exhaustive. Their aim was to "establish the closest co-operation with the employees in an effort to stimulate their interest and to evoke a spirit of public service, in pursuance with the general policy of the Central Authority". However, as Lord Citrine pointed out at the 1949 course, "it was impossible for the B.E.A. to hold conferences of all employees, but they hoped to reach the vast majority through key men, such as power station superintendents...It was the policy of the Central Authority and the Divisional Controllers to encourage conferences in the Divisions, not only to deal with technical questions, but to explain the broad questions/
questions of policy which were involved. It was especially important that all matters directly affecting labour should be finally understood by the superintendents and such conferences would facilitate this." This particular course was certainly an ambitious one; there were lectures on administration, the general structure of the industry, negotiating and N.J.A.C. machinery, occupational health safety regulations, and legal principles affecting power station staffs and premises. This crowded programme occupied one week for each group of power station superintendents attending.

The enthusiasm of Lord Citrine for the work of Buxton was not shared, however, by all employees. At a meeting of the Portobello L.A.C. on 21st March, 1951, a workers' representative suggested that the B.E.A. should abandon Electricity Hall, Buxton, as a school and convert it into a convalescent home for B.E.A. employees. This proposal was in answer to a statement of the N.J.A.C. about the difficulties of providing a convalescent home. The L.A.C. thought that this was a good idea and put forward the recommendation to the D.J.A.C. It never got any further.

Technical training was provided at a new residential centre, Horsley Towers, Surrey, opened in 1950. This building had been used during the war as the temporary headquarters of the C.B.E. Series of courses have been run for such employees as stokers and auxiliary plant attendants. These men, who receive full pay and all expenses, attend for a fortnight at a time in groups of 25. The B.E.A. provides instructors from the industry, and the syllabus includes boiler-plant construction, maintenance and operation, and the fundamentals of heat, temperature, pressure, composition of fuels, and combustion. These courses include an address by Lord Citrine or some high official upon the structure and organisation of the industry, and employees are taken on visits to the B.E.A. Headquarters and power stations. 200 employees attended in 1950, and 1,200 in 1951.

In 1951 two "induction courses" were provided. Their aim was to give newly joined employees at B.E.A. Headquarters some insight into the structure of the industry.

Further/
Further innovations were the "Spring and Summer Schools". The first was held at Magdalen College, Oxford, in August, 1946, and was attended by 100 students from all grades of the industry. Addresses were given by B.E.A. members and officials, trade union officers, and Area Board representatives. The progress and structure of the industry was discussed from various aspects. Further schools were held in April, 1949, and March, 1950, at King's College, Cambridge, and in July, 1949, at Magdalen College, Oxford. In 1951 and 1952, two more summer schools were held at Magdalen College at the request of the N.J.A.C. A resolution of the N.J.A.C. strongly urged all Electricity Boards to avail themselves of the facilities offered by these schools. Sessions on engineering programmes, economic planning, agricultural electrification and accountancy were added to the schools' activities.

The selection of applicants for the Spring and Summer Schools is carried out democratically. Names are submitted by the L.A.C. to the D.J.A.C. which then fills the vacancies allotted to it. The quotas allotted to the South East Scotland D.J.A.C., for instance, in 1952, were three employees from the Areas and three from the divisions for every Oxford and Cambridge Course, and two from each section respectively for the Horsley Towers courses. The occupations of the selected employees show a bias in favour of skilled and supervisory grades, as the following list indicates:

**Area Board Employees**

<table>
<thead>
<tr>
<th>Cambridge</th>
<th>31st March - 8th April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrician, Fife Sub-Area</td>
<td></td>
</tr>
<tr>
<td>Installation Inspector, Edinburgh Sub-Area</td>
<td></td>
</tr>
<tr>
<td>Asst. Section Head, Area Board Headquarters</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Horsley Towers</th>
<th>14th - 22nd May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Jointer, Southern Sub-Area</td>
<td></td>
</tr>
<tr>
<td>Clerk, Lothians Sub-Area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oxford</th>
<th>9th - 17th July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter Fixer, Edinburgh Sub-Area</td>
<td></td>
</tr>
<tr>
<td>Fitter, Fife Sub-Area</td>
<td></td>
</tr>
<tr>
<td>District Engineer, Central Sub-Area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Horsley Towers</th>
<th>23rd - 31st July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation Inspector, Fife Sub-Area</td>
<td></td>
</tr>
<tr>
<td>Junior Engineer, Edinburgh Sub-Area</td>
<td></td>
</tr>
</tbody>
</table>

**Division Employees**

<table>
<thead>
<tr>
<th>Electrician, Falkirk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitter, Bonnybridge</td>
</tr>
<tr>
<td>Assistant Engineer, Dunfermline</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linesman, Dunfermline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typist, Division Headquarters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fitter, Galashiels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitter, Portobello</td>
</tr>
<tr>
<td>Senior Assistant, Division Staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-station Attendant, Portobello</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boilerhouse Superintendent, Falkirk</td>
</tr>
</tbody>
</table>
In addition to the national courses the D.J.A.C.'s were encouraged to hold courses of their own. The South East Scotland D.J.A.C. arranged to hold two week-end courses annually at Peebles.\footnote{1} Talks were given on various technical aspects of generation and distribution, and on the part employees can play in helping to run the industry, but the discussion periods were regarded as of equal importance to the lectures. These conferences last from Friday evening to Sunday tea-time, and all expenses, i.e. travelling, board and accommodation, are met by the Electricity Boards, and special buses to and from Edinburgh are provided. Although the trade unions were asked by the South East Scotland D.J.A.C. to circulate their information through their branches "to evoke a greater interest" (an implicit confession that the normal channels of communication in the industry were inadequate) the number of applications continued to fall below the number of vacancies.

It is perhaps not surprising that employees long accustomed to regarding the Sabbath as sanctified by double-pay should be reluctant to spend a week-end learning about "the firm" in their own time. Another problem is that of reaching the lower manual grades to whom a week-end at Peebles (instead of watching "Hearts" or "Hibs") seems to offer no appeal. The danger of these week-end conferences is that they are more likely to appeal to potential supervisory and administrative grades anxious to impress their superiors. There is nothing reprehensible in this attitude, of course, and the instruction is in itself very valuable. But insofar as the courses were designed to give the ordinary workers a sense of participation in their industry they cannot be judged completely successful.

One engineer of the South East Scotland Electricity Board suggested that more attention should be paid to the training of non-engineering professional staffs in "human relations". These are the officials, he argued, who are most guilty of thinking and acting in non-human terms. Many of them left school at 15 or 16 and went into an office or a bank, gaining experience analogous to that of the Civil Service/  

Service. Superficially, they are experts in industrial problems, but they know nothing of the problems of the factory floor or the warehouse. On the other hand, "we engineers have been through the mill; we have worked on overhead lines and done all the dirty jobs in the industry. We know what workers are talking about - we are much more in touch with the workers than the administrators. We know from experience when to be tough with the men and we know when we have said enough... We come down to earth in human relations. The fellow in the cable gang knows that we can do his job - but he knows that the administrator can't, and that puts a barrier between them."

This criticism is representative of the attitude of engineers towards the administrator who lacks basic technical training. The President of the Electrical Power Engineers Association, for instance, pointed out recently that whereas the private sector of the engineering industry is headed largely by engineers, trained in organisation, who have risen to high executive posts, there are far too many administrators with a Civil Service or non-technical background in the nationalised electricity industry. The occasion of the statement was well-timed; it was a dinner attended by Authority and Board members.

Nevertheless, it must be admitted that there are still engineers in the industry who, in spite of their experience - or perhaps because of it - are cynical and impatient of any guidance up the "human" side of management. The older managers get along well enough with their prejudices and are in no mood to change the habits of a lifetime. But the younger ones are benefiting from the emphasis placed upon the wider problems of management, although they are justified in pointing out that colleagues in other branches of the industry stand equally or more in need of such training.

The B.E.A. has not confined its attention to broadening the outlook of its technicians and manual workers, but has also tried to acquaint its clerical and administrative workers with the "field work" of the industry. B.E.A. Headquarters and divisional headquarters staffs have participated in organised visits to local generating stations where, having previously been shown a film describing the elementary/
elementary principles underlying the generation of electricity, they have been able to see how the electricity is produced.

Arrangements have also been made for selected officers to attend courses from time to time at the Administrative Staff College, Henley-on-Thames.

International Exchange Schemes

The Education and Training Committee of the N.J.A.C. suggested in 1949 that the B.E.A.'s Graduate Training Scheme should be extended to non-British trainees. As a result, 40 men from overseas were accepted in 1950 for courses of training in engineering, commerce or accountancy. These men were sponsored by their governments or by some public body. In addition, 14 European students were accepted for eight weeks vacation training, under arrangements made by the Imperial College, University of London, and the B.E.A. International arrangements were not confined to trainees. The B.E.A. decided in 1950 to arrange for the interchange of staff for short periods with Electricite de France and the Milan Edison Company. Eight officers were to be selected annually from the technical, commercial and administrative staffs of the Authority and the Area Boards. In fact only six officers were selected in 1951, four to go to France and two to Italy. The interchanges were for periods of from two to three months, to enable those selected "to undertake a comprehensive study of the organisation, methods and techniques of the branch of the industry corresponding to that from which they come". The men selected were concerned with recent developments in transmission, extra-high-tension switchgear and protective gear, lighting installations, and distribution and control systems.

Let us examine the effects of the educational and training policies described in the preceding pages.

Although no conclusions have yet been reached by the B.E.A. as to the categorisation of "technicians", certain trends can already be clearly seen. The preliminary interview of entrants to the industry; advice as to whether they should pursue "practical" or "theoretical" studies; the three streams of graduate, student and craft apprentices; an introduction of formal contracts and greater organisation for/
for apprentices of all types. One engineer has described the trend as leading to a caste system in the industry; the best jobs will go to university graduates, and to public and grammar school boys who proceed to full professional status via the Higher National Certificate; the next rung will be occupied by public and grammar school boys with their national certificates; and the craftsmen and ancillary employees will come from elementary schools, as will the unskilled members of the industry.

This policy cannot be attributed, however, solely to the B.E.A. It reflects changes which have been going on in our educational system. Local education authorities now "skim the cream" of intelligent children and send them on to a grammar school where they stay until 16 or 18. Those who proceed to the university may enter the Electricity Supply Industry as graduates; those who do not may enter the industry as student apprentices, although many boys are reluctant at, say, 16 to undergo anything approximating to apprenticeship. The elementary schools are left with boys who are unlikely to rise beyond the level of craftsmen. On the other hand, it may be argued that selection at the age of 11 is too early, and that some boys are wrongly classified at that age. If so, there is sufficient flexibility in the B.E.A. scheme for elementary school boys to pass from craft apprenticeship to student apprenticeship, and even to graduate traineeship. But the academic qualifications required present a formidable obstacle to an elementary schoolboy who is able and ambitious, who was denied further education. One complication is that different local education authorities send boys to grammar schools at different I.Q. levels. Thus, a boy with an I.Q. of 115 would be admitted to a grammar school in one city, yet denied entry in another which fixes a minimum I.Q. of 130. In any case, electrical engineers seem highly suspicious of I.Q. tests. A committee appointed by the I.E.E. to investigate the practical training of engineers rejected "The/"

1. Although these schools are now designated "secondary," the description "elementary" is used to avoid confusion in pre- and post-nationalisation comparisons. The education provided at the new secondary schools is at present little beyond former elementary level.
the use of psychological tests for engineers. They should only be used as supplementary to the usual methods of selection."¹. This attitude seems to be reasonable. Personality plays an extremely important part in the make-up of the successful engineer; in the case of graduates, for instance, a first class honours man may stay in a junior appointment while a pass degree man may rise to the top. Insofar as personality assessment is the least scientific of psychological testing, the engineer - the most practical and sceptical of men! - is entitled to be cautious.

Having registered the doubts of various engineers, we must concede that the educational policy of the B.E.A. is the inevitable outcome of sociological changes in the nation at large. Insofar as the new graduate trainees will come from a more representative cross-section of the community than, say, thirty years ago, there is greater opportunity than ever before for boys of all sections of the community, whether from the straitened middle classes (for whom Mr. Philip Magnus showed concern in his report to the George Heriot's Trust)² or from the working classes.

It is doubtful whether this fact is fully realised by non-graduate employees in the electricity industry. There is still some ill-feeling felt by these men towards the entry of university graduates at a high point on the ladder and destined for senior appointments. The ostensible objection is that they lack the practical experience necessary to manage effectively, but the real objection is that they have come up by an easier route and enjoyed advantages which the non-university man missed.

This attitude will probably die out, as two trends become clear. First - and by no means new - the technical needs of the Electricity Supply Industry are best met by university trained engineers. Second, it will eventually become clear that the national education system is intercepting all boys of unusual ability before they can enter industry, and is sending them on to higher education. As this ideal becomes/

². See pages 580-1 above.
becomes realised the industry will find fewer and fewer men of exceptional ability in its own ranks.

Nor does the graduate enter the industry automatically at the top level any more than he did previously. Although his progress is naturally accelerated under the B.E.A. scheme, he starts off by doing a course of 13 weeks manual labour (and according to men who have done it, it is manual labour!). He digs trenches for laying cables and sweeps floors in storerooms, before passing on to more technical work. Sometimes the graduate apprentice gets bored with the practical training; he has assimilated so much in the previous three years that he finds the pace slow. But in learning the viewpoint of the labourers and craftsmen he is undergoing valuable training in human relationships. He might benefit even more if he were to spend one year as an apprentice before going to the university. The most democratic university graduate is apt to feel a loss of dignity when asked to do certain tasks, whereas he would have performed them with great zest in his pre-university boyhood. Furthermore, a year's practical background is an aid to university study.

We can therefore record that since nationalisation there had been increasing "stratification", but by keeping the national certificate syllabuses common to different grades of apprentices, vertical movement is still possible, although perhaps less in practice than in theory.

The standardising of agreements for apprentices and the extension of indentures to all grades is another post-nationalisation development. An economic historian like Mr. Lipson might prefer to call such a development a reversal to medieval practice, thereby demonstrating that there is nothing new in the planned economy. It is impossible to refrain from quoting the views of one engineer (a member of the Scottish Centre of the I.E.E.) upon the indenturing of student apprentices: "We are considering the training of professional men, i.e. men who must trust and be trusted. Is it proper that their first contact on joining industry should be a formal document implying that neither party can trust the other? This may be necessary when dealing with craft apprentices, but when one is supposed to be dealing/
dealing with educated, cultured people the inclusion of a contract document shows a lack of understanding." Nevertheless, the introduction of written agreements is welcomed by the students themselves.

Courses for engineers upon management, wage negotiation, consultation, etc., were introduced to the industry in the post-nationalisation era, and must be accounted a very tangible and vital part of the education and training of senior employees. It is only fair to record the opinion of an engineer in the employment of the Edinburgh Sub-Area that such courses are not so useful as technical courses, and in view of the limited time at the disposal of engineers for courses, the latter are to be preferred. This is perhaps understandable from the viewpoint of the individual undertaking, but not from the viewpoint of the industry as a whole. The B.E.A. has been concerned with making engineers more conscious of the "human" side of management, and there have been discussions on including appropriate subjects in the syllabuses of engineering degrees and diplomas. But there would be grave dangers in overloading the studies of men who are primarily concerned with gaining an adequate knowledge of physical sciences and relevant technological subjects based on those sciences. At the moment, it is felt that studies on "human relations" must wait until the student has acquired technical qualifications. Nevertheless, it seems that the nationalised authority has made considerable progress in this field.

The B.E.A. has, however, done more than the other Fuel and Power industries to acquaint its employees with the problems and organisation of their industry. All addresses at spring and summer schools have been circulated as pamphlets as have a number of speeches of B.E.A. members and trade union leaders. Pamphlets have been issued giving a simplified explanation of negotiating and consultative machinery. The B.E.A. has also published popular summaries of its Annual Reports.

But whereas education and training in the art of giving orders is not particularly difficult, education and training in the art of receiving orders meets with greater resistance on the part of students. The less skilled workers in the industry, as we have indicated, have shown little desire to learn how or why their industry/
industry is run, and the majority of them lie outside the schemes of education and training provided by the B.E.A. For these workers the post-nationalisation developments have been unimportant. This is hardly surprising; the fact that they choose to remain unskilled indicates that they feel no need of technological training, and as long as "general background" courses are held in the workers' time it is unlikely (in the South East Scotland area, at any rate) that much interest will be evinced. This does not mean that the workers are sullen, resentful, down-trodden, or reactionary. It merely indicates that they are shrewd and level-headed Scotsmen.

**Promotion Policy.**

Since nationalisation, no national promotion policy has been introduced into the Electricity Supply Industry. The autonomous nature of the Area Boards militates against administrative uniformity in the absence of any agreed policy. An informal understanding, however, has been reached with the trade unions to the effect that vacancies shall be advertised, and that where qualifications are equal, preference shall be given to those already employed in the industry. The only "principle" (if it can be so called) of promotion policy is that merit is the chief determinant, although greater weight is often given to seniority in some of the lower grades.

All vacant posts in an Area, apart from lower grade positions, are advertised throughout the Area, and preference seems to be given to these applicants, although for some positions employees from other areas can apply. Selection panels usually consist of three people who are senior to the man to be selected. One member of the panel is a representative of the department concerned (whose opinion is usually decisive), another is a representative of the Establishment Branch, and the third is an independent person from another branch. The object of including an Establishment Branch representative is to introduce some uniformity into the standards and procedure of selection in the industry. In fact, the acceptance of certain technical qualifications as indicating capacity for various jobs helps to provide uniformity/
uniformity in selection procedure.

Frequent changes of job on the part of employees are discouraged by the Areas, and one change per year seems to be a tacitly accepted maximum. There is no formal instruction, however, to this effect, although employees are wise to refrain from too frequent applications.

There is no machinery whereby employees are permitted to take part in the determination of promotion procedure, although they can make suggestions through the National Joint Advisory Council, and they may even appeal against specific appointments through this Council.

The views of a trade union upon this topic tend to vary according to whether its members are looking upwards or downwards. The E.P.E.A., for instance, is concerned with advancing the interests of its members, but many of these members occupy management posts in which their attitude is virtually that of the employer towards manual and other subordinate grades. In the former capacity, E.P.E.A. officials have expressed strong views about desirable promotion procedures which can best secure justice for their members, and they have criticised certain individual appointments. It is doubtful whether they realise that these arguments apply with equal force to subordinate grades; if you are claiming the right to determine the means of access to the job above you, you can hardly complain if someone below is making the same claim in respect of your job. E.P.E.A. members in their managerial capacity, however, have shown little sympathy with the claims of lower grades to be consulted upon promotion procedure; indeed, as an organisation, the E.P.E.A. has opposed workers' participation. Mr. A. F. M. Palmer, M.P., E.P.E.A. representative on the N.J.A.C., and Vice-Chairman of the Council's Education and Training Committee, has deplored the small number of manual workers who are equipping themselves for promotion by using the industry's education and training facilities. This may be one reason for the E.P.E.A.'s cautious attitude towards workers' participation in promotion policy.
GENERAL CONCLUSIONS

It is not proposed to summarise the conclusions reached in the preceding chapters but rather to review certain important trends which have emerged, and which throw light upon possible future developments. We shall examine the effects of public ownership in the three industries upon the functions of the trade unions, and whether the new machinery of joint consultation and negotiation satisfied on the one hand the aspirations of the workers and on the other the needs of consumers. The pervasive influence of these three industries in the economy of the country lends special significance to the position of the consumer.

The function of trade unionism down to the eve of the Second World War was almost exclusively the protection and advancement of their members' economic interests, although the prosperity of the industry in which they were employed was a factor that they could never completely ignore. This latter consideration came to the fore at the Trade Union Congress of 1928. The alternatives before the movement in that year were outlined by General Council in its report to Congress. The first was for the unions to say frankly that they would do everything possible to bring the industrial machine to a standstill in the hope of creating a revolutionary situation which would lead to the overthrow of capitalism. The second was one of standing aside and telling the employers to get on with their own jobs while the unions pursued a policy of fighting for improvements on a sectional basis. Both these courses were rejected by the General Council, but they were not to lack advocates over the following quarter of a century. Indeed the views of the present President of the Scottish Area of the National Union of Mineworkers would lie somewhere between the two policies which were rejected by the Trades Union Congress twenty-five years ago.

The T.U.C. at its 1928 meeting went on to adopt a third course. This was for the trade union movement to say boldly that not only was it concerned with the prosperity of the industry but determined to have a voice in the way it was carried on. The unions, it was argued, could find more use for an efficient industry than a derelict one, and for this reason they should use their power to promote and guide the scientific re-organisation of industry. It is not difficult to see the influence of Walter Citrine in the framing of this resolution: twenty years later, as Chairman of the B.E.A., he was to have the opportunity of encouraging his employees to implement it.

But the 1928 resolution had very little influence upon the course of events,
except in the negative sense of averting the application of revolutionary tactics. As we have seen, attempts at introducing joint consultation machinery into the coal industry proved abortive. The employers failed to breathe life into the 1930 Act, and although the 1936 Agreement provided for a Joint Standing Consultative Committee nothing was done at the district or pit levels. Although Whitleyism secured a stronger foothold in the Electricity and Gas Supply industries, its repercussions at the undertaking level were very slight.

It is safe to assert that, beyond intermittent expressions of interest in productivity and industrial prosperity, the trade unions in coal, electricity and gas supply stood largely outside the business structure of industry without responsibility for its conduct except for securing the observance of agreements into which they had entered on their members' behalf. It was not so much that the unions renounced this responsibility - the 1928 resolution was never rescinded - as that employers, particularly in the coal industry, were reluctant to share their traditional authority. This fear could hardly have been engendered by the modest proposals of the Whitley Reports. The Whitley scheme never intended that workers in individual establishments should be given any share in actual executive powers. This was made very clear by the Edinburgh Corporation, for instance, in respect of workers employed in its Electricity Undertaking. Whitleyism merely required that trade unions and employers should consult regularly upon a wide range of questions falling outside the traditional fields of collective bargaining, and in doing so should accept the furtherance of industrial efficiency as a matter of mutual concern.

It was only after the outbreak of war in 1939 that the character of trade unionism, as standing apart from the business structure of industry, was modified. The object of most of the developments described in this period in the coal industry - particularly after the setting up of the Ministry of Fuel and Power - was to involve trade unions at all levels in some measure of responsibility for securing industrial efficiency.

The most significant change brought about by nationalisation was that the adoption of joint consultative procedures became a statutory obligation. Furthermore the scope of joint consultation was increased; hitherto it had been restricted largely to manual workers. After nationalisation it was extended in the Electricity and Gas industries to a considerable range of semi-managerial or executive grades. As we have seen, the Electricity industry in Scotland had fulfilled its obligation in this respect to a much greater extent than the Scottish Gas Board.

Post/1

1. See Pages 523.

2. See Pages 136-140
Post-nationalisation joint consultation is like Whitleyism, however, in that it concedes no formal transfer of powers from the management to the joint committee. In a sense it remains an uneasy compromise; it attempts to secure industrial democracy without losing in the process trade union independence over wages, hours of work, holidays and other negotiating matters and without sacrificing management responsibility for administrative and technical decisions. This latter consideration assumes the greatest importance in the coal industry, where the manager is under certain statutory obligations as regards safety and working conditions. Thus, in the Knockshinnoch mine disaster enquiry Mr. Abe Moffat on behalf of the Scottish Area N.U.M. was particularly concerned to demonstrate the undivided responsibility of the manager under the Coal Mines Act. Where human life is at stake, clearly defined authority should rest with the manager, and recognition of this fact need not militate against effective joint consultation.

But although the boundaries of joint consultation may be defined in theory, in practice they are continually being modified. This tendency will probably continue as the unions become more conscious of the possibilities of joint consultation. It is likely that they will approach - and eventually pass - the present boundaries. For instance, if trade unions at national or regional or district level or trade unionists in a particular undertaking are consulted in advance about managerial policies, and in the course of discussion give advice which results in modifications of managerial policy, some degree of responsibility for carrying out decisions must devolve upon both parties to the compromise solution. If joint consultation is to be successful a greater degree of responsibility must be thrust upon, and willingly shouldered by, workers in the industry. This assumption of responsibility is likely to be a slow process. It has/

1. In the North East Division of the National Coal Board it was agreed in February, 1953, to set up "working parties" representing both sides of the industry to re-organise and administer pits classified as "inefficient". Although the manager will retain legal responsibility for the day-to-day control of the pits, the working party will take most of the decisions affecting re-organisation and the increasing of efficiency. A working party will consist of ten men, including the pit manager, union branch secretary and other union officials and representatives of the overmen, deputies and shotfirers. It will not replace the pit consultative committee, which will concentrate upon welfare matters. Although the measure is an emergency one, it has far-reaching possibilities. Theoretically it does not transfer "sovereignty" to the workers; the N.C.E.'s responsibility to Parliament is still unimpaired. Yet in practice it represents a half-way house between joint consultation and joint control. It should be noted, however, that the stimulus to workers' co-operation in this case is provided by the fact that the pits concerned will close down completely unless they can be made to function economically. The real test of co-operation, however, lies in making economic pits still more economic.
has been difficult enough in the sphere of negotiations to make some rank and file trade unionists realise that by signing a collective agreement they have thereby entered into certain obligations. This, however, is a problem that the trade unions will have to solve for themselves; the Scottish Division of the N.C.B. and the appropriate Electricity and Gas Authorities can hardly be expected to undertake the education of trade unionists in the art of representative and responsible government.

In Midlothian the danger at the moment, according to my experience of joint consultative committee meetings in the coal and electricity industries, is that too little rather than too much responsibility is being claimed by the workers. Matters which encroach upon management responsibility should not be too hastily ruled out of order, even though there is constitutional authority for exclusion. It is far better to afford ample discussion on these topics. In the case of the coal industry the manager can usually secure a sympathetic hearing if he defends his authority on the grounds of safety. Or upon a complicated planning problem, for instance, he can indicate that the inescapable logic of technical facts makes the matter inappropriate for joint consultation. What is important is that management should accept the onus of demonstrating on rational grounds why such-and-such a decision should be made unilaterally even though constitutionally he need give no explanation. In such a case the spirit of the law is more important than the letter.

Measures for involving the trade unions in a gradually increasing degree of responsibility without altering the present basic pattern of public ownership are not acceptable in the long run, however, to the exponents of joint workers' control.¹

The difference between joint consultation and joint control is that in consultation the power of decision remains ultimately in the hands of management, however much the decisions may be influenced by the attitudes of those who are consulted. Joint control would mean that actual decisions binding on both parties would be taken jointly. At the national level the Board would presumably consist of trade union representatives and members elected to represent the public interest, either by consumer councils or through Parliament. But trade unions could not pass beyond joint consultation to joint control without having to assume a degree of responsibility going far beyond that which mere joint consultation involves. In sharing the power of decision they would necessarily/

¹. The extreme Syndicalist arguments (e.g. Sorel, Griffuelhes and Lagardelle) on the subject of direct workers' control are not considered in this survey.
necessarily come to share in the responsibility for the proper conduct of the industry or undertaking, in the public interest. This would almost certainly involve for their representatives a conflict of loyalties when what they thought desirable in the interests of industrial efficiency clashed with what their members wanted. It would be difficult for trade unions to run in double harness, serving in one capacity as protective agencies, democratically responsible to their members and required to carry out their members' wishes, and in a second capacity as joint managers of the industry, responsible to the public as a whole for carrying out its wishes and for achieving the highest possible efficiency. What would almost certainly happen is that the trade union members of the Board of control would be in frequent disagreement with the other members. In such cases it would be necessary to appeal for a decision to some higher authority - probably the Minister of Fuel and Power. The frequency with which appeals would probably be made would mean in effect that the Minister would be running the industry himself, assisted by departmental advisers.

Another disadvantage might be that the workers would lose confidence in their unions' capacity to carry out their traditional protective functions in the matters of wages and hours of work. They would suspect their leaders of having been corrupted by too much contact with the public members of the Board. In this way the trade union representative would get the worst of both worlds.

It is interesting to note in passing that the traditional protective functions of trade unions in the U.S.S.R. have undergone considerable modifications since the Revolution.

Collective agreements had existed under the Marxist regime, but were given up after 1917. They were re-introduced in 1922 and during the period of the New Economic Policy played a major part in regulating conditions of employment and particularly wages. In the early thirties their role in the economic and social life of the U.S.S.R. was considerably affected by the introduction of large-scale economic planning. The collective agreement became mainly an instrument for fulfilling the Five-year Plans, and consequently involved positive obligations in respect of maximum output for the workers and their unions as well as for managements of undertakings. As the principles of planning were increasingly applied to the Soviet economy, the fixing of wages by agreement was gradually replaced by a system of standard rates as fixed by the State. In the words of the Chairman of the Central Council of Trade Unions: "Now that economic planning has become the guiding principle in the economic life of the country, problems/
problems of remuneration cannot be resolved outside the Plan or without relation to it. The collective agreement as a means of fixing wages has, therefore, lost its object." At the same time there was an increasing tendency for labour legislation to lay down compulsory rules not subject to any modification by collective agreements. In February 1947 the system of collective agreements was revived, and by the end of the year agreements had been signed covering fourteen million workers. The new collective agreements, however, were fundamentally different in content from those concluded during the era described in Soviet terminology as "the first period of the building up of the Socialist State". The present agreements of the "second period of the evolution of the Socialist State" confine themselves to definite reciprocal undertakings by parties in regard to action that will help in attaining or exceeding the targets set in the economic plan, and in improving the working and living conditions of the workers. Wage rates are excluded from the terms of these agreements; they continue to be fixed by the State, although there are provisions in the agreements for ensuring the strict observance by management of these rates.

The policy introduced in 1947 thus directly linked improved production with improved welfare and amenities for the workers. But it did not alter the basic assumption of Communism that trade unions cannot be independent. They still remain a subordinate part of the state machine, under the direct control of the political power. Agreements are not valid until they have been approved by the Government and disciplinary powers enjoyed by management are written into the agreements. Trade unions are debarred from advancing the economic interests of their members, although they are entitled to protect their statutory rights. The supremacy/


2. "When an agreement has been signed by the head of the undertaking and the Chairman of the factory committee it must be registered. Registration is carried out by the trade union central committees and by the appropriate ministries. Six copies of the agreement, including all appendices mentioned in the text (for example, technical and organisational details, safety and hygiene measures, etc.) must be submitted within three days of signature, and registration must take place within seven days of the despatch to the competent authorities. If it is found that an agreement sent for registration contains provisions that are not in accordance with the labour legislation or the figures laid down in the plan, the union central committee and the appropriate ministry must make the necessary corrections before registering the document. They must also ensure that no forms of remuneration not approved by the Government are included". Ibid. Page 480.

3. Ibid. Page 482.
supremacy of the state is recognised by the unions as unreservedly to-day as it was in 1925, when M. Tomsky, leader of the All-Russian Central Council of Trade Unions, stated that his council worked "under the direct control of the Communist Party, under its sleepless observation".

It is difficult to imagine British trade unions working cheerfully under the "sleepless observation" of some superior political committee. It would be interesting, for instance, to see what would be the attitude of the energetic leader of the Scottish miners, Mr. Abe Moffat, if the day came when he had to subordinate the claims of his union to those of a committee of party planners. Mr. Moffat's popularity, and success, derive from an uninhibited pursuit of the miners' economic interests. If the Communist Party came to power in Great Britain it might well be that a policy designed to promote the interests of all industrial workers would result in calling a halt to the more extravagant demands of the miners. Would Mr. Moffat be as successful in halting these demands as he has been in advocating their fulfilment? In other words, could he keep the loyalty of the Scottish miners (which, at the moment, he unquestionably enjoys) while urging upon them a policy of caution dictated to him by a superior committee? Or might not the attitudes engendered in half-a-century's battle on the Scottish coal field render the Scottish Area of the N.U.M. impatient of "sleepless observation" by the party hierarchy. It must be remembered that trade unions in Britain are neither creatures of the State nor fictions of the law; they are living organisations with their own wills and their own laws of growth and activity. Such genossenschaften as these would fit very uneasily into the pattern of the proletarian "general will". Complete State regulation of wages, for instance, would deprive trade unions of their élan vital. As negotiating bodies they would no longer enjoy the right to decide for themselves upon their wages policy. As such a system gained ground the members' desire for, and interest in the organisation would diminish. The knowledge that the organisation no longer had the final decision in making agreements would strike a mortal blow at the sense of fellowship and of common endeavour which have characterised British trade unionism. It is impossible to deprive the trade union movement of its character as a free organisation and at the same time maintain it as the protagonist of genuine economic interests.

The ideal of trade unionism in Britain, as accepted by the T.U.C. and by the Labour Party was that trade unions should be neither agents of the State nor entirely outside bodies playing a critical and hostile role. Rather should they remain/
remain autonomous institutions within the general framework of the democratic state, but with functions that link them to the state in a consultative and constructive way. This ideal found expression in the Labour Government's nationalisation acts.

As early as 1906 the Labour Party had been cautious in the role it afforded to trade unions in its nationalisation bills. Indeed the Nationalisation of Coal Mines and Minerals Bill provided for straightforward departmental control. The Nationalisation of Mines, Canals, Railways, and Tramways Bill provided for purchase by the Local Government Board, but departmental powers of control might be delegated to a Board of Control of fifty to a hundred persons. During the First World War, however, government direction of industry as exercised through departmental control proved unpopular with representatives of all sides. This was made clear by witnesses before the Sankey Commission. Similar opposition to direct government control was voiced in the Second World War. In April 1944 the Tory Reform Committee issued their "National Policy for Coal" in which they demanded that, notwithstanding the need for an overall national policy, there should be a relaxation of Government interference in every respect of day-to-day management.

This dislike of departmental control was one of the factors which led to the Labour Party (under eloquent pressure from Mr. Herbert Morrison) to favour the device of the Public Corporation in the nineteen thirties. Mr. Morrison has since revised his opinion. In his evidence to the Select Committee on the Nationalised Industries, 1952 he considers that departmental control might be re-introduced into the Gas and Electricity Industries, and the National Boards abolished.

There were strong syndicalist elements, however, in the coal industry. In 1914 a powerful section of the miners wished to establish "co-ordination of all industries on a central productive board who, with a statistical department to ascertain the needs of the people, will issue its demands on the different branches of industry, leaving it to the men to determine under what conditions, and how the work should be done." There was a movement away from syndicalism, however, in the Miners' 1936 programme. It was proposed that a "British Coal Corporation/"

1. Bill 244 of 1913.
2. Bill 103 of 1906.
4. Para. 830.
5. South Wales Miners' Programme: "The Miners' Next Step"
Corporation" should be responsible for the proper direction of the Coal Industry, and for securing its efficient management. The Corporation would be appointed by a Minister of Mines and would include representatives of the workers in the industry. But the plan went on to state that any person holding office in a trade union or similar organisation would be required to relinquish such office on appointment to the Corporation. Management would be effected through Regional Boards having a large measure of autonomy.

On 20th November 1941 the executive of the Miners Federation of Great Britain decided to urge upon the Government the need for the nationalisation of the coal industry, and on 6th April 1942 the National Council of Labour, in conjunction with the M.F.G.B., placed before the Labour members of the Government a scheme for the requisitioning of mines by the Government and their control by a Board. This Coal Board, it was stated, should consist of representatives of the Government, the Mining Association, and the M.F.G.B. The function of this Board was to plan and re-organise the industry, and regional boards should be established similar in composition to the National Board, and should deal with the day-to-day problems of production and labour relations within their regions. Pit Committees should be established at each mine, composed of equal representatives of mineworkers and management nominees. They should be responsible for ensuring that all demands from the Regional Boards were fully met in the pits.

The principle of trade union representation was finally renounced in a report of the T.U.C. in 1944. Although trade unionists were to be eligible for office, it was agreed that they should in no way be representatives. The influence of the trade unions upon the industry should be exerted from an independent position through special advisory and consultative machinery.

The Coal Industry Nationalisation Act of 1946 followed the T.U.C.'s recommendations fairly closely. Although pit production committees, as we have seen, became statutory they were not strengthened beyond the point at which they might interfere with the general administration. It was made quite clear that the administration was to be vested in those who possessed the technical skill, i.e., the management. This Act represented a victory for "Morrisonism" and the rout of near-syndicalists. The Gas and Electricity nationalisation acts, although they laid down constitutions of a more federal nature, likewise made no concessions to joint control or outright workers' control.

Although rejected in the nationalisation acts, the idea of joint control still

still has many advocates within the labour movement. Some of these critics of the present structure of nationalisation argue, however, that if joint control is to be objective it should be sought, not for the trade unions as such, but through the workers. In other words a separate hierarchy should be constructed ranging from the individual undertaking to the national level. It should be possible to conduct elections for administrative pit committees and for area, divisional and national boards; and for parallel representative agencies in the electricity and gas industries. The direct election of supervisors, deputies, and other officials raises more serious problems. Clearly the technical requirements of the industry would have to take precedence over a literal interpretation of direct democracy. Modern psychological techniques make selection a more rational and efficient process than election. What is important is that the rules and methods of selection and promotion should be democratically accepted by the employees in the industry. These matters, however, have a manner of working themselves out satisfactorily over a period of time. The Co-operative Movement, for instance, relies on elected Boards of Management for policy-making, and appointments of technical and professional officers are made by these Boards. There is no question of entrusting mass meetings of members with these appointments. But the members as a body remain ultimately responsible.

Joint control would involve bringing in at some level the representatives of the public interest, as already indicated. The decisions mutually reached by the joint Board would theoretically be binding upon all the workers in the industry, if the setting up of representative government had involved the appropriate corollary of responsible government.

It would be naive to assume that complete harmony between the public interest and the workers' interest would automatically ensue. The workers might, in any case, challenge the validity of the concept of "public interest". The public representatives, if appointed by Parliament, might be advocating the views of a majority political party with its own economic bias. These are but a few of the difficulties; the point to be emphasised is that the workers will still feel the need for an organisation of their own standing outside industry. They will still require a trade union to which, in the last analysis, they can appeal to protect their traditional interests.

One justification for the continuation of this rôle of trade unionism is pluralistic. "The structure of social organisation must be federal if it is to be adequate. Its pattern involves not myself and the State, or my groups and the State, but all these and their inter-relationships". According to this point of view/1.

view the individual citizen has a right, even a duty, to scrutinize every command of the State and of every other group, and to ask himself whether it ought, in the given circumstances to be obeyed, as conforming to his own sense of what is right. He is entitled to disobey if the command violates his deepest convictions. This does not mean, however, that every time he disagrees with the substance of an order he should rebel, for there are many matters on which conformity is the lesser evil, and disobedience should always be a last resource.

This doctrine of "contingent anarchy", if it is accepted, means that the member of a trade union may be acting rightly, may even be fulfilling his clear duty, in siding with his union against the State. According to this political theory, the trade unionist is bound to examine the substance of the dispute, to decide for himself which party is right in the given situation, and to determine his active allegiance accordingly. His allegiance is where justice is, and not where authority is, and he himself must be the judge.

Even if the full pluralist argument is not accepted most theories of the modern democratic state also leave room for the right to strike.

This right would stop short of action designed to overthrow a democratically elected government. It argues, however, that the cessation of work is a right that does not conflict with the unitary concept of the democratic state. One of the conditions of successful majority rule is that minority views must not be outraged, and only through the constant vigilance of group organisations such as trade unions and their vigorous activity in pursuit of their own activities can democracy respond to changing opinions and circumstances. Within the democratic system the State will be right from its own point of view in pursuing the aims of the majority, while allowing freedom of expression and persuasion to minorities. A trade union may be equally right from its own standpoint in challenging the rest of the community, provided its challenge does not imply the overthrow of democracy. The framework within which this challenge must be set is the universal acceptance of the view that, in the long run, the maintenance of democratic methods is a principle transcending in importance any single group purpose.

It may be argued that the sanction of the strike - this expression of "contingent anarchy" - can no longer be justified in industries that are nationalised. The assumption that remote parliamentary control of an industry means complete industrial democracy has been proved, in preceding pages, to be unjustified. But even with the establishment of a much more elaborate hierarchy of consultation and participation at every stage in the industries concerned, the need/

1. For further discussion upon this point, see Sir Alexander Gray: "The Socialist Tradition."
need for a gesture of an extreme kind - such as a strike - might still arise.

In political democracy the decisions of government are in the public interest because of the continuous consultation of people and organisation representing the various interests involved in proposed legislation and other measures. It may often be necessary to take decisions that seem unpopular, and in such a case the government will subsequently be vindicated (or condemned) at the polls. Electoral procedures are thus the sanction that ensures consultation; and both elections and consultation can only function properly if the conditions of democracy, such as freedom of speech and opposition, are observed. If joint consultation in industry is properly carried out decisions are taken only after complete information has been given and there has been an opportunity to present alternative viewpoints.

But if management takes a decision which displeases the workers there is no electoral procedure to serve as an ultimate sanction. Clearly action could not be vindicated or challenged on a vote by workers in the industry in the same way as the government seeks the verdict of voters in a General Election. In the latter case the voters are judging the effects of government action as it concerns themselves. But in industry there are interests other than those of the workers to be judged; there are the interests of consumers. A simple electoral sanction must thus be denied to workers in an industry.

In a nationalised industry we must therefore rely upon a scrupulous observance by the Board and its subordinates of their statutory obligation to consult the workers. To the extent to which this statutory obligation is fulfilled can final decisions be said to be mandatory upon the workers. It need hardly be added that "mandatory" is not used in any legal sense, but in accordance with the usage of democratic political theory. There may be cases, however, where workers feel that to secure publicity for their alleged grievances or to bring extra pressure to bear, they should resort to the right of "nonconformity", and cease work. Such action will reflect a breakdown in the consultative procedure, but it does not mean that anarchy is round the corner. Democracy is not a device for suppressing discontent, but rather for giving discontent creative and purposeful expression. That discontent occasionally overflows into destructive channels is no cause for pessimism or cynicism, although it certainly should serve as a warning to those concerned in the government of industry.

The preceding argument has been designed to refute the view that nationalisation - even in a form involving a greater degree of workers' participation than at present - removes the need for trade unions or involves the abolition of the right to strike. What is true of the democratic state is true of a large nationalised/
nationalised industry with its concomitant statutory obligations to secure the goodwill and loyalty of its workers. "Modern democracy stands or falls with the right of discussion and with the existence of a recognised opposition. That implies that the sincere expression of differences is essential to political wisdom". It is not enough to declare that there is a unity of aim between management and workers without devising means for making this unity real. In a large industry, as in the State, an organic conception of democracy - with its doctrine of the "general will" - may be nothing more than a device for coercion. A more advanced view of democracy acknowledges the need for consultation and even of opposition. The existence of opposition, provided it is exercised with responsibility, serves to lend a deeper significance and permanence to common endeavour. Over simplified views of industrial partnership which assume that identity of interest is self-evident are as ineffective as Rousseau's concept of the "general will". That management and workers should be working together towards a common purpose is, of course, axiomatic, and should be asserted and re-asserted as long as industrial and trade union leaders have breath to draw. But this common purpose - if it is to be any more than a tautological "general will" - must be enriched by the processes of democracy. Clearly it would not be expedient to transfer all the machinery of political democracy to industry; some obstacles to such a transfer have already been discussed. But there is much that industrial democracy - at timid and uncertain youth - can learn from his elder brother.

Industrial peace cannot be achieved merely by converting the trade union hierarchy into the management hierarchy. If the trade union ceased to exist in its former capacity it would not mean an end of strikes. It would merely mean that when strikes occurred they would be unofficial ones. And unofficial strikes are much more disruptive of industrial peace than official ones; there is no proper authority with whom to negotiate a return to work.

Hence the need, even if the principle of joint control is accepted, for leaving the trade unions to perform their historic function and for creating a separate structure of representative government within each industry.

It should be added that the most trade unions would strenuously oppose such a step. The establishment of an elaborate alternative organisation to act as a focus for the workers' loyalty would arouse as little enthusiasm among the trade unions as did the early shop steward movement. They would be afraid that their own power would be weakened. The Labour Party is not indifferent to T.U.C. feelings upon this matter and would be similarly hostile. The opposition of the Conservative/

Conservative Party to joint control would be none the less vehement because it was based on completely different reasons.

It emerges from the foregoing study that the future of industrial relations in the coal, electricity and gas industries is likely to be more concerned with the successful operation of joint consultation than with the introduction of new schemes of joint control. This conclusion is not only in line with the historical development of trade unionism in these three industries; it is based upon a realistic appraisal of practical politics in mid-twentieth century Britain.

Having accepted that trade unions should preserve their protective functions while at the same time accepting a consultative role, let us see how far the existing machinery is appropriate for these purposes.

Under the nationalisation acts it would have been possible for the coal, electricity and gas industries to have combined negotiating and consultative functions by setting up a single joint body at each stage of organisation to deal with every type of subject which either side wished to discuss. Negotiating matters would have passed upwards if necessary to the final stage of arbitration, while recommendations would have been made upon those topics falling within the sphere of consultation. One argument in favour of this course was that negotiating machinery enjoyed greater prestige among the unions than the more effective Whitley consultative machinery. Some unionists saw joint consultation as a logical extension of the negotiating process and hence a function to be performed by the same machinery. One fear was that the separation of joint consultation from negotiations might involve the setting up of committees independent of the unions, but these fears were allayed by the compromise solutions already described. The other alternative would have been to establish entirely separate negotiating committees and consultative committees at each stage. The strongest argument in favour of this course was that consultation and negotiation required different attitudes; co-operation was the quintessence of the former, whereas hard and shrewd bargaining was characteristic of the latter. It would have been disastrous, it was argued, to have brought the uncompromising atmosphere of the negotiating committee into the sphere of consultation. The combination of the two functions would involve consultation in the ill-feeling and hard-hitting which traditionally spring from negotiation. It would destroy confidence in the consultative committee, and perpetuate the idea of opposing "sides". This idea of "sides" should be kept out of joint consultation (although of course, it always remains in the background as the ultimate sanction); there should be no group trying to impress its will on the other party. Hence the necessity/

1. See Pages 142-149.
necessity to remove from the field of joint consultation areas where unity of interest or where opportunity to reach the correct solution is absent. Joint consultation should not impinge upon arrangements for negotiations over wages, salaries and conditions, nor should it undermine managerial responsibility where imposed either by Act of Parliament or by the conditions of sheer technical knowledge and judgement.

As we have seen, a further complication was the existence of separate negotiating bodies for different groups of workers, for instance, manual workers, clerical and administrative workers, and, in the Electricity Industry, technical workers. Where there is one hierarchy of committees for both negotiation and consultation, this involves a division between groups of workers for consultation as well. Where there are two separate hierarchies, the groups may remain separate for negotiation and come together for consultation. The industries concerned adopted neither complete separation nor complete combination of the consultative and negotiating functions.

The Coal Industry has favoured the separation of functions, although there are various complications. At the undertaking level negotiations are between the management and the miners lodge.

The Pit Conciliation Scheme provides for the settlement of disputes at the undertaking level; if this fails, there is provision for arbitration at divisional and national levels (the final body being the National Reference Tribunal).

There is a separate procedure for managerial and technical staff, and for clerical staff. For the winding enginemen, after a prolonged period of controversy these employees were included in the N.U.M. Machinery. Although in Scotland their interests are officially protected by the Scottish Colliery Enginemen, Boilermen and Tradesmen's Association (which had dealt directly with the employers through its own machinery since 1931) this union is for all practical purposes now part of the N.U.M.

For consultation there is an additional stage in most divisions, at the area level, but Scotland had resisted the establishment of committees at this level. Some groups of workers (clerical, for instance) are excluded from representation on the undertaking consultative committees, and only some of the unions concerned have seats on the national and divisional committees.

The Coal Industry has also set up various advisory consultative machinery; this includes the Coal Industry Social Welfare Organisation and the Colliery Welfare (Pithead Baths and Canteen) consultative machinery. Both these organisations/1. See Pages 106 - 109
2. See Pages 114 - 117
tions took over activities formerly within the scope of the National Miners' Welfare Joint Council which had in its turn replaced the Miners' Welfare Commission. The structure of this advisory machinery has been examined critically in a previous chapter. It is sufficient to recapitulate here that the machinery is far too elaborate, and is incomprehensible to many workers in the industry. In view of the educative function of joint consultative machinery - the training of workers towards an intelligent participation in the affairs of their industry - this criticism is not merely concerned with redressing an administrative defect; it is germane to the realisation of the aims of joint consultation.

The structural separation of negotiating and consultative matters in the coal industry has not prevented the N.U.M. from exerting strong influence in both capacities. This influence makes the demarcation less definite in practice than might be imagined from a superficial appraisal of the formal machinery. The dangers were foreseen by the N.C.B. which took an unusually strong line in resisting the claim of the N.U.M. to possess the exclusive right to nominate (through the local branch) candidates for election to the colliery consultative committee. The N.C.B. was finally compelled, however, to concede the claim and the N.U.M. has thus secured a right which is possessed by no other union in the Fuel and Power industries nor in any other nationalised industry. Furthermore, both the Lodge Secretary and the N.U.M. Area Agent of the ex-officio members of the committee. The fact that they are ex-officio does not prevent these officials in my experience of meetings in Midlothian collieries from playing a predominant role in the discussions. Indeed, the workers' representatives tend to look for leadership from these members.

To recommend the rescinding of this privilege of the N.U.M. would be as practical as recommending a return to horse-drawn winding engines. The realities of the situation must be acknowledged; refusal to do so will only involve the exacerbation of mutual mistrust. But the N.C.B. should emphasise more strongly than it does at present that the N.U.M. should approach its consultative duties with a different attitude from that which it is entitled to display in the Disputes Committee, or round the negotiating table.

The Electricity supply Industry also separates the negotiating and consultative functions. The national and regional councils of the old Joint Industrial Council have been maintained, the Works Committees have been set up in/

1. See Pages 163-165
2. See Pages 148-149.
3. See Pages 152-156 and 166-167.
4. It should be noted that the Works Committees in the Electricity Supply Industry also cover topics which in other industries are left to the consultative machinery.

See Pages.
in undertakings where they did not previously exist. National and regional negotiating councils have been established for clerical and administrative workers, for technical workers, and for managerial grades.

Consultative work is undertaken by Advisory Committees, including all grades of workers, which operate at national, regional and undertaking levels. The National Joint Advisory Council has divided its activities among six standing committees; general purposes, education and training, efficiency, health, safety, and welfare. On each of these committees there is a responsible specialist officer from the management side. The annual report of the N.J.A.C. is a model which might be studied with advantage by the Coal and Gas Industries: it describes in detail the work of consultation at all levels, outlining the subjects discussed, action taken, and numbers of members attending. We learn, for instance, that between June 1949 and March 1950, out of a total of 529 items discussed by district councils, 192 fell within the category of "welfare", 131 within "education and training", 101 within "health", 99 within "safety", and 6 under the category of "efficiency". These statistics provide useful self-criticism of the distribution of time spent on the various items.

In the Gas Industry joint consultation is combined with negotiation at the national and regional levels, but not at the local level. At the national and regional levels, the pre-nationalisation machinery for manual grades - the N.J.I.C. and its regional councils - continued to function as before. There was slight reorganisation to fit these regional councils to the new Area Gas Boards, but apart from these geographical alterations the work of negotiation and consultation is carried on in the same fashion as pre-vesting day. National and regional councils have been set up since nationalisation for other groups - for intermediate grades and staff employees. A national council has also been set up for senior gas officers, but there is no regional organisation for these employees. With regard to certain craft union members negotiating procedure was carried over unchanged from pre-nationalisation days.¹ New procedure was established, however, with the Plumbing Trades Union;² this lays down agreed methods of negotiating without going to the length of setting up a formal national and regional hierarchy.

Although there was provision for Works Committees under the old J.I.C. very little was done in this direction. Since nationalisation, joint consultative committees may be set up in accordance with the terms of a model constitution agreed between management and the unions. Unlike the Works Committee in the Electricity Industry these committees are debarred from discussing "questions relating/
relating to wages and salaries and conditions of employment which are normally dealt with between the employers and the appropriate trade unions. Their functions are similar to those of the Local Advisory Committees in the Electricity Industry and the Colliery Consultative Committees in the coal industry. Candidates for election may be nominated by any two employees, but the qualification for candidature is membership of any trade union which is party to the agreement under which the committees are established, or a trade union recognised by the Gas Council. This qualification is wider than that operating in the coal industry, where the N.U.M. exercises the right to select candidates.

It has been impossible at the undertaking level, to assess the success of joint consultation since nationalisation in the Scottish Gas Industry, owing to the procrastination of both management and unions in adopting the model constitution. The possible effectiveness of joint consultation in the three industries can best be judged by examining the various subjects which have fallen within its scope.

In the case of welfare there can be little doubt that considerable gains have been secured by the workers in all the industries concerned since nationalisation. The greatest benefits have been secured by the miners. Cynical N.C.B. officials have pointed out that the miners can claim little credit for co-operation when it is directed towards increasing their own amenities. But even such "one-way traffic" consultation demands patient examination of rank-and-file opinions. The N.C.B. tended in its early enthusiasm to assume that all welfare expenditure would automatically be welcomed. As we have seen, this was by no means true of the Midlothian coal fields. In pre-nationalisation days the miners showed well-defined priorities in the kind of welfare amenities that they demanded through their District Welfare Committees. Attempts to initiate amenities for which the miners had not asked met with little success - canteens were an example of this unwanted paternalism. This experience shows that it must not be assumed that in the case of welfare formal assent constitutes "joint consultation". The Gas Industry in Scotland perhaps goes to the other extreme, however, in leaving it to individual undertakings to initiate all suggestions for improved welfare. The Electricity Industry strikes a better balance by combining regional co-ordination with the exercise of initiative by the local advisory committees. The administration of such welfare amenities as Clubs, sports grounds and recreation centres offers useful opportunities for joint consultation or even joint control. Indeed, such administration was providing a useful training ground/
ground for democracy in the coal industry long before nationalisation.

Expenditure by the three nationalised industries on clubs and centres for the exclusive use of their employees has been cautious. This kind of expenditure has been taken over in the coal industry by a new independent organisation, the C.I.S.W.O.\(^1\). In the gas and electricity industries in Scotland sports clubs and recreation centres have been used by only a small proportion of the workers, and the new nationalised boards have been wise not to embark upon lavish new schemes, whatever the prestige value of such expenditure. Many workers prefer to use the clubs which serve the community in which they live, rather than a club based upon their place of work or occupation. This was not formerly true of the coal industry, but the Miners' Welfare Commission shortly before nationalisation began to encourage the participation of miners in clubs and social activities beyond the limits of their own calling. This policy has been developed since that time, particularly in the new coal fields in East Fife. Those welfare officers who are anxious to extend their activities to the organising of their employee's leisure would do well to bear in mind the words of Mr. Thornton, the nineteenth century mill-owner in Mrs. Gaskell's "North and South":

"I say the masters would be trenching on the independence of their hands, in a way, that I, for one, would not feel justified in doing; if we interfered too much with the life they lead out of the mills... I value my own independence so highly that I can fancy no degradation greater than that of having another man perpetually directing and advising and lecturing me, or even planning too closely in any way about my actions".

Mr. Thornton's century-old advice serves to remind us that the citizen should not be encouraged to devote all his waking hours in social activity based upon his own industry, or trade union. The very complexity of our industrial civilisation which first encouraged workers to coalesce into groups for economic and social purposes has since provided a variety of institutions for amusement, recreation, sport, adult education, and many other social activities. The ever-increasing specialisation of the modern age has abolished the simple conception of the all-embracing guild where the workers gathered for recreation and fellowship as well as for mutual economic protection. A single organisation which expresses all the diverse forms of human fellowship is no longer required. Nor indeed is it desirable that the modern citizen should want to find all his satisfactions through the medium of one organisation. "The assumption behind democracy is that there is such a thing as a community - men and women living a social life in natural groups - the family, neighbourhood groups, cultural associations/\(^1\) Coal Industry Social Welfare Organisation.
associations of all kinds";¹. Lord Lindsay's criticism of Sparta's military machine might be applied to an industrial organisation which makes excessive demands upon its members. "In organisations like an army, men make themselves parts of a machine: their behaviour is dictated by the necessities of the organisation. This is a simple and straightforward thing to do so long as the organisation is subordinate to the community. It is so, as long as the individual's life in the community outside the machine counts more for him than his life inside".²

There is really no conflict however; conscientiousness in citizenship and work take sustenance in a democratic state, from each other. Although a considerable sentimental value attaches to the conception of a many-sided organism, serving its members in social as well as industrial ways, our more sophisticated view of democracy favours a wide measure of functional decentralisation. This is almost as important to industrial democracy in the nationalised industries as the administrative decentralisation upon which so much current controversy is taking place.

In the sphere of production it is more difficult to judge the success of consultation since nationalisation. In the Coal Industry, however, as we have seen, there is less difficulty than in Gas and Electricity Supply.

Production, the subject of consultation, can be viewed from three aspects; the formulation of long-term industrial policy; the planning of production over a period of time at the undertaking level; and the breakdown of the plan within the various departments in the day-to-day operation of the undertaking. It is this last named aspect of production, the work arrangement which takes place in an undertaking, which was assigned by Whitleyism to joint works committees, but it must be remembered that this is only one stage in the process.

In all three industries, long-term production plans involving considerable capital expenditure and large-scale re-organisation have been submitted to the workers' representatives and largely approved by them. It is not so difficult at the national and regional levels to secure agreement upon the broad aspects of industrial policy. It is doubtful, however, whether in many cases approval signified much more than formal acceptance by overworked trade union officials. These officials possessed little technical knowledge upon the wider problems, and were in any case more pre-occupied with negotiating matters. National policy, however, is in the long run concerned with breaking down the overall plan into sections which can be implemented in the regions and in the individual undertakings. These smaller plans should be considered at the level at which they will

2. Ibid. Page 188.
will be effective before final decisions are taken, and there has been criticism at the Arniston Colliery, for instance, that this is not being done.\(^1\) Whereas at the national level, agreement upon a five year plan may require little more than a nod of assent from a trade union official, consultation upon production planning and work arrangement at the undertaking level involves much more positive collaboration on the part of the workers. This is particularly true of the coal industry with its many and varied production problems and in the Scottish Division the collaboration has not been as positive as management has had the right to expect. In the electricity and gas industries the planning of the work of the undertaking is more within the province of a few specialist officers, and conditions are fairly standard throughout all undertakings in the industry. In the case of the electricity industry, "press-button" and "lever-pulling" techniques have long displaced variegated manual tasks. One danger to be guarded against, however, is the abrogation of the worker's right to be consulted in cases where specialised knowledge is required; technical ignorance should be a challenge to education rather than a reason for neglecting consultation. If the matter is undoubtedly too highly specialised to be a proper subject for consultation, a unilateral decision will usually be accepted by the workers with good grace. In the case of the electricity industry's local advisory committee the representation of all grades makes it possible for employees to exchange information upon their various skills and techniques.

One important question arises out of the foregoing discussion upon production. This is whether production targets and methods of increasing productivity should be written into agreements between the nationalised boards and the unions, particularly in the coal industry. It is true that a recent wage increase granted by the N.C.B.\(^2\) involved a reciprocal promise by the union to co-operate in a drive for increased production, but there was very little substance to the promise. Might not a greater stimulus be given to consultation on production matters if more specific qualitative obligations were accepted by the unions in exchange for concessions by the boards?

This device has been adopted since 1947 in the U.S.S.R. Agreements are drawn up annually between the management of each industrial undertaking and the union factory committee. The management, (i.e., the "Director" or the undertaking) acts both as the holder of a particular managerial post in the factory community and as the representative of the undertaking. Since the main task of the head of an undertaking is to manage it and organise the work so as to attain or exceed the planned targets, the agreement specifies his precise obligations in this respect and

\(^1\) See Pages 151-152  \(^2\) See Pages 79 and 155
and in connection with material living conditions of the employees. The other party, the union factory committee, enters into the agreement as the agent of the trade union group to which the employees of the undertaking belong. This group is required to do all it can to exceed the planned targets, and the agreement specifies this general obligation in concrete terms and assigns precise duties to the factory committee (as the organ of the trade union) in order to ensure fulfilment of the production plan of the undertaking. It should be noted that certain basic standards in respect of work and welfare are laid down by the State and agreements must not fall below this level. Also any directives received from the appropriate Ministry must be written into these annual agreements. Before the agreement is finally drawn up the director and the factory committee prepare a draft agreement which includes instructions received from the State Minister, the comments of the workers, and any proposals designed to avoid errors made in the previous year's agreement.

The next step is for each workshop or shift to discuss the draft in detail, and amendments are suggested. The final draft, embodying those suggestions which are acceptable to the management, is then submitted to a general meeting of employees. Further amendments will probably be offered by this meeting, and after discussion the agreement is signed by the director and the chairman of the factory committee. Differences between management and workers which cannot be reconciled are submitted to the appropriate Ministry and trade union central committee. In the event of disagreement persisting at this level, the matter is submitted to the Central Council of Trade Unions which gives a final decision in consultation with the appropriate Ministry. We must remember, however, in discussing this procedure, that behind this formal hierarchy lies the Communist Party and there is probably considerable adjustment and compromise behind all the official consultation.

Two important points emerge, however, from the new Soviet collective agreement procedure. The first is that specific quantitative obligations by the workers (to achieve a certain output, in the speeding up of production methods, in increasing the number of machines operated by one worker or group of workers, and in such matters as increased rapidity of circulation of working capital by a definite percentage over the previous year's figure) are set forth side by side with reciprocal obligations by the management to spend specific amounts on various welfare matters, including provisions for feeding, convalescent facilities for sick workers, day nurseries, and housing construction for the workers. Rates of wages and hours of work lie outside the scope of bargaining, although/
although where the management enjoys the option of deciding between piece-rates and day or weekly wages there is room for concession here and the management can hold out the "carrot" of piece rates, which seem to be generally preferred by the workers.

The second point to be noted is that the agreements also lay down the responsibilities of management with regard to production. The need for management to create the conditions necessary for increased productivity is sometimes overlooked, for instance, in discussions upon the British Coal Industry; all the emphasis is upon the need for co-operation by the workers. These Soviet agreements recognise that increased productivity requires the acceptance of precise obligations by both sides.

It is doubtful, however, whether the method of annual collective agreements with regard to production targets and increased productivity could be usefully applied to the British Fuel and Power industries. The welfare amenities which are used as an incentive in Soviet undertakings are regarded by many British workers as theirs as of right, and certainly not as concessions to be paid for by higher output. There was, in the Coal Industry, as we have seen, an approach to this method in the old Miners' Welfare Committee, but it is doubtful whether the payment of 1d. for every ton of saleable coal produced to the Miners' Welfare Fund acted as a very powerful incentive to increased production. Even the decision of the N.C.E. to add an extra twopence per ton to the statutory levy did little to reinforce this incentive.

The enforcement of such agreements raises a further problem for the British Fuel and Power industries which does not apply to the U.S.S.R. The obligation to attain the standard rate of production in that country is a legal one. The threat of prosecution lies over those workers who fail to fulfil their legal obligations under the contract (such as the duty to make full use of the working day, to take care of property, to carry out production jobs punctually and honestly). It is true that the management is under similar legal obligations, and may also be sued by any of its employees for failing, for example, to pay a piece-worker transferred to a lower grade job the difference between the rates for the two grades. But British experience indicates that it is much easier to secure the observance by management of its obligations (whether legal or assumed under collective agreements) than observance by the workers. Thus a legal code which is applied equally to management and workers is invoked more frequently against the workers than by them. In Britain there is, of course, no attempt to apply legal sanction to agreements between management and unions, and the history of

1. See pages 140 and 188.
of compulsory arbitration in this country demonstrates the futility of attempting to give the force of law to such agreements.

Industrial relations in the U.S.S.R. can draw upon the further weapon of "moral or political obligation". Soviet legal doctrine distinguishes between obligation on the one hand and moral or political obligation on the other. The latter category embraces such activities as "socialist competition", Stakhanovite methods, and mass political and cultural education. Individual workers are expected, for instance, to do all they can to improve their occupational skills, and allegations of neglect lead to strong moral pressure, involving such techniques as public denunciation. At three monthly intervals there is a "mass scrutiny" carried out by management and employees' representatives, and the extent of fulfilment of the collective agreement is checked point by point. Reasons for non-fulfilment must be explained and the guilty parties denounced. If non-fulfilment has infringed legal requirements, the guilty parties are punished. But "moral error", although less specific, is feared just as much and is not lightly repeated.

How far these methods have succeeded in the U.S.S.R. it is not possible to judge on the basis of knowledge available to non-Russian economists. But no one who has moved among Scottish miners, for instance, can believe that such methods would meet with success in this country. Any attempt to prosecute workers for breaches of a collective agreement negotiated between their union and the N.C.B. would lead to widespread industrial strife. On the other hand, the threat of "public denunciation", without the backing of legal prosecution, would arouse little more than amusement among Midlothian workers. The slow and painful progress that the Scottish Division of the N.C.B. is making in its "industrial education", in the awakening of the miners to their moral obligations, is a reminder that the Scottish worker regards propaganda of any sort, however valid, with a much more critical eye than his Russian counterpart. And the pressure of public opinion, which in Russia and the U.S.A. seems to possess almost legal sanction, is far less strong in Britain. The ultimate right of "nonconformity" is as deeply written into industrial relations as into our social and political fabric.

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1. Lynden Macassey: "Labour Policy True or False" 1922.
We may applaud this fact or deplore it; but it cannot be ignored in any realistic study of industrial relations.

It seems therefore that without the sanctions which are available under the Soviet system, little can be gained by committing the workers to precise production targets and methods under formal collective agreements, even in exchange for obligations by management in matters of welfare. The best guarantee of increased production is none the less valid for being the most old-fashioned, i.e., payment of piece-rates wherever possible, with bonuses for regular attendance. In this context, a wages policy which links output as directly and intelligently as possible to remuneration is the main prerequisite for successful consultation upon production matters, whether at national, district or undertaking level.

With regard to Education and Training, facilities have improved since nationalisation in the coal and electricity undertakings examined in this survey. As far as the Scottish Gas Board is concerned there is very little difference now from the pre-nationalisation further education facilities, although the training of certain categories of workers improved considerably.

Although many of these schemes were agreed at national level by consultation with workers' representatives the onus is largely upon management at the undertaking level to keep the workers fully informed of the facilities offered, and to encourage participation. Management should not be afraid of active propaganda on this matter. Education "is not one of the cases in which the tender of help perpetuates the state of things which renders help necessary. Instruction, when it is really such, does not enervate, but strengthens as well as enlarges the active faculties".

It is in the Coal Industry in particular that education and training can make a tremendous contribution to improved industrial relations. To teach young miners that they need not share the fear of the older generation towards new mechanical methods; to teach young mine managers that strains and stresses apply to men as well as to pit construction - these are some of the aims of such schools as the Lingerwood Training Centre, and Newbattle Abbey Residential College in Midlothian. Witnessing the boys under training at Lingerwood, one is intensely aware of the enthusiasm of the instructors for the new human material which/

1. This reference is to what is being done at present in Scotland, and not to what the Board says is being done. Official statements on educational policy are not borne out by the evidence of employees.
3. See Pages 249-252
4. See Pages 258-260
which they are helping to shape. So much depends upon success at this level; a new and lively interest in production, a mutual confidence between miners and management, a free co-operation in the pursuit of common aims. All these attitudes are still sadly lacking among the older miners. It is not completely their fault; they are prisoners of the past, bred in a tradition that regarded compromise as defeat. It is impossible to attend a pit committee meeting without respecting these older men, their faces lined with toil of many a year spent below the surface of Midlothian; proud and sensitive and always afraid that they might be accounted less than other men. These miners have qualifications which their sons, bred in an easier school, will never possess; but it is to the boys now passing through the training centres that we must look if we hope to achieve an enthusiastic participation in the expansion of the industry.

Just as education and training can engender the attitudes and knowledge necessary to make joint consultation a success, so in turn can consultation play a part in improving the content of the courses and facilities offered to successive intakes of new entrants.

The various education and training schemes - particularly the Ladder Plan of the Coal Industry - make it easier for employees in the industry to qualify themselves for promotion. This should not, however, be exaggerated; although it is comparatively easy to gain promotion to supervisory posts, promotion to management posts is still difficult for employees who have not started very early in their careers upon a prolonged course of training. Older employers still often resent the entry of young university graduates, but the policy in all three industries of insisting that these men work their way through the various departments, taking their share of the ordinary daily tasks, is silencing some of the criticism of their promotion to high posts in the industries. In any case, promotion policy cannot be based exclusively upon notions of rough justice; it must take account of the technical needs of the industry concerned. Employees tend to stress age and seniority as qualifications for promotion, whereas management must naturally be concerned to select men who will improve efficiency and who, if required, can display authority. Where there are fairly well defined technical qualifications for a job - as, for example, colliery manager - there can be less disagreement.

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1. Little progress has been made in Scotland with the "industrial education" (e.g. courses in human relations) of miners already in the industry. According to an official responsible for N.C.B. courses at Newbattle Abbey Residential College this is largely the fault of the Scottish Area of the N.U.M. Although the union has shown an enlightened attitude towards the education and training of young miners wishing to secure professional and technical qualifications at college or university it has shown no enthusiasm for allowing rank-and-file working miners to attend "human relations" or "co-operation in production" courses organised by the Scottish Divisional Coal Board. It is feared that such courses would weaken the loyalty of miners towards their union.
It has been a criticism of the South East Scotland Division of the British Electricity Authority, however, that some pre-nationalisation administrative and clerical employees of the Edinburgh undertaking have been promoted without too much regard for formal qualifications. Clearly, the establishment of standard qualifications should, wherever possible, be arrived at through the joint consultative machinery. This would not affect the right of management to appoint the best men within those limits. In nationalised industries like coal, gas and electricity it is particularly important that workers should not feel grievances over promotion. Whereas in the days of the independent undertakings a man who felt that he had been passed over for promotion could apply for jobs with other employers, to-day it is much more difficult for a man who has been denied promotion in his own group or division to obtain redress.

With regard to the work of negotiation it has emerged from this survey that if the three nationalised industries continue to operate under their present administrative structure, and the objective of the trade unions continue to be as described above, there need be little change in negotiating procedures. Indeed the present procedures owe very little to nationalisation; they are the outcome of the struggle by the unions for half a century to secure national minima in the determination of wages, and the establishment of national wage structures through national determination of wage variations and regional zoning schemes. It is not proposed to recapitulate the various stages in this development; they have already been described in detail as they affected each industry. It is sufficient to note that the nationalisation acts although laying down statutory obligations upon the boards to negotiate with their employees, did little more than confirm existing practice. Not only were procedures, with slight modifications, continued by the new authorities but most pre-nationalisation wage agreements were taken over intact, and were only amended some time after nationalisation upon representation by the unions. The prevailing atmosphere of negotiation at the time of the Acts was one of continuity rather than sudden change.

The trend to national wage determination, however, left room for local differences, and there will still be need in the future for such flexibility.

1. One improvement, however, would be a less arbitrary interpretation by the Boards - particularly in the Electricity Supply Industry - of unions "apparenting to them to be appropriate" for negotiating and consultative purposes. See, for example, Pages 507 - 512 and 534 - 540. With reference to the exclusion of the National Union of Public Employees from the National & District Councils.

Questions which should be left to initiative within the individual undertaking, such as the settlement of piece-rates, qualification for dirty work allowances and production bonuses, should not be removed too far from the local managements and trade union branches. In the Coal Industry the Pit Conciliation Scheme \(^1\) enables a clear distinction to be made between the principles of schemes of payment and the application of those principles.

The danger is that individual undertakings in the nationalised industries are afraid to make decisions that will act as precedents. This is no new tendency in Gas and Electricity, where the Edinburgh managers before nationalisation made strenuous efforts to find out the practice in other undertakings. Since nationalisation the Scottish Gas Board has instructed local managers to settle all problems that they can within their establishments. In spite of this there is a tendency to pass too many matters on to the regional and national negotiating bodies. These councils should not hesitate to send back problems which should properly have been settled at the undertaking level. Sometimes the failure to dispose of the question arises through the intervention of an over-zealous regional or national trade union official who takes the matter out of local hands. The Board headquarters, on the other hand, tends to blame managers for being afraid to exercise local autonomy in these matters. The reply of the managers is that reference back to higher authorities for decision avoids unpleasantness. A manager who is always having his decisions reversed on appeal is endangering his promotion prospects. The fact remains that delays in negotiation arise not so much from the nature of the machinery as from the way in which this machinery is being used, and there is need in all three industries for intensive education of employees of all grades, including managers and supervisors in negotiating procedures.

The continuity of development in all aspects of industrial relations during the present century has emerged very clearly in this survey. Indeed, many of the improvements secured by the workers originated during the Second World War and the nationalisation acts merely confirmed these innovations. It was war rather than the nationalisation legislation which was the forcing house of government control and trade union participation in industrial policy.

It was argued before 1945 that public ownership would remove all the antagonisms which had militated against good industrial relations. The basic antagonism was seen to be the profit motive; the workers saw that the increased efficiency of their enterprise merely added to the profits of the owner, and this recognition served as a mental barrier to wholehearted co-operation in production.

\(^1\) See Pages 106 - 109.
Under nationalisation, it was argued, this mental barrier would be removed. Parallel to this was the "economics of abundance" argument. Trade union restrictionist policy belonged to an era when scarcity was the predominant feature of economic life. Workers "had their economic attitudes basically determined by a consciousness of scarcity of opportunity", hence their defensive alliances into trade unions to protect their economic position. At the level of economic theory scarcity was expressed in terms of the Wages Fund Theory. But by the end of the nineteenth century there was a marked advance in material comfort, even for the mass of workers, and there was a growing sense of economic expansion. In the period after the first World War the attacks upon the "economics of scarcity" were intensified. The advances in technology, industrial organisation and productive efficiency led to a belief that the world had reached the stage where, given the will to do so, we could produce enough to provide everyone with a high level of material comfort.

"Working people are conscious, as never before", wrote W. Milne-Bailey in 1934, "that the problem is no longer the technical difficulty of producing enough, but is rather the problem of planning production, together with distribution and consumption, so that the fruits of scientific progress become available to all." It was argued that with these developments it was possible for the trade unions to supercede their earlier limited and negative policies by positive and constructive policies based on a wider conception of vocational aims and functions. The era of abundance could best be ushered in by public ownership with the workers co-operating wholeheartedly, knowing that their jobs were secure, and that the expansion of output would benefit society as a whole.

The abolition of the capitalist was advocated as the best means of ending antagonism between capital and labour. But antagonism of another kind might remain. "An industrial society is not so much divided between the rich and the poor as between those who manage and control and take responsibility and those who are managed and controlled and have responsibility taken for them."

This theme was given dynamic expression by James Burnham in his "Managerial Revolution". Writers like W. Milne-Bailey and J.N. Whitehead (in his "Leadership in a Free Society") stressed that management was primarily a technical job; the factory manager was a technician who had to contrive an organisation of human effort.

1. S. Perlman: "A Theory of the Labour Movement" Page 6
2. W. Milne-Bailey: "Trade Unions and the State"
effort which in conjunction with the operation of machinery would produce the most efficient results. The conclusion drawn by W. Milne-Bailey was that management "has nothing in common with the profit-making element". It had become a form of specialised labour, with its own standards, its own code, and its own vocational bodies. Although its functions included the co-ordination and direction of other workers' effort, this factor entered at every stage of the labour hierarchy. This analysis explains away any antagonism between management and worker; once the profit motive has been abolished the way is open for uninhibited co-operation.

Even in the Soviet Union it appears that managers and workers have not yet become equal partners although this was the ultimate objective. "The abolition of the essential distinction between mental and physical labour by raising the cultural and technical level of the workers to that of the technical personnel cannot but be of paramount importance for us." Stalin goes on, however, to administer a rebuke to over-enthusiastic comrades. "Some comrades assert that in the course of time not only will the essential difference between physical and mental labour disappear, but so will all distinction between them. That is not true ... The essential difference between them, the difference in their technical levels, will certainly disappear, but some distinction, even if inessential will remain, if only because the conditions of labour of the managerial staffs and those of the workers are not identical. The comrades who assert the contrary do so presumably on the basis of the formulation given in some of my statements, which speaks of the abolition of the distinction ... between mental and physical labour, without any reservation to the effect that what is meant is the abolition of the essential distinction, not of all distinction."

Stalin, it will be observed, has carried the argument a stage further than writers like W. Milne-Bailey. The latter assumed that the mere establishment of public ownership would convert technical and commercial management into just another trade or craft, no different in its implications from the manual skills of the workers. Stalin argues, however, that this stage must await the day when "the workers had raised their cultural and technical level to that of the engineering and technical personnel." It is difficult to see why Stalin should go on to justify the continued existence of "inessential differences" even after this stage has been reached. What are these inessential differences? It is possible to imagine differences that are inessential to Marxist theory. But are they/

3. Ibid. Pages 33-34.
4. Ibid. Page 33.
they inessential to management-worker relations at the undertaking level? Antagonisms can be willed out of existence more easily in theory than in practice. In any case, the continuation of antagonisms— in the sense of healthy opposition and mutual adjustment of interests in the daily running of an undertaking—does not herald the doom of counter-revolution. They are a sign of continued vigour and resilience. Industrial democracy should be able to take such antagonisms in its stride, and recognise in them a condition of healthy growth.

What will give rise, it may be asked, to differences between management and workers in the nationalised industry in the future? Setting aside all the human problems that lie within the province of the psychologist one basic economic relationship will continue to exist. That is the relationship between the consumer and the producer. Management must continue, even under nationalisation, to aim at maximum production at low cost. In the sense that it still serves the community against the workers it cannot be dismissed as a mere technical function. It represents a very real and important economic interest.

The concept of management versus the workers need not invoke fears of exploitation and economic whips and all the weapons of l’ancien régime. All it means is that in the last analysis, having provided joint consultation and schemes of welfare and education to enhance the status and well-being of the worker, management still should take a stand in support of the interests of the consumers. There is nothing sinister or vicious in this antagonism between management and workers. It is rather like the relationship which exists between a university principal and the lecturers on his staff. Left to their own devices lecturers would tend to increase their salaries on every available pretext and allow their own convenience to dictate the length of university terms. Somebody has got to keep a weather eye on the interests of the consumer. In the absence of this gentle supervision, the healthy regard which would be paid by lecturers to their own self-interest might run counter to the interests of the community.

In the amount of time devoted to discussion of wage increases, overtime payments and improved conditions there is little to choose between branch meetings of the Association of University Teachers, the National Union of Mineworkers, the Electrical Power Engineers Association and the British Gas Staffs’ Association. Discussions upon obligations usually come, if at all, at the end of the agenda.

The safeguarding of consumer interests must be given more positive for- mulation than an expression of pious hope. The Fuel and Power nationalisation acts do in fact enjoin the various authorities to further "the public interest."
The Coal Industry Nationalisation Act\(^1\) for instance charges the N.C.B. with the duties of "making supplies of coal available, of such qualities and sizes, in such quantities and at such prices, as may seem to them best calculated to further the public interest in all respects, including the avoidance of any undue or unreasonable preference of advantage". The Electricity and Gas nationalisation acts make similar provisions.

Clearly the responsibility for efficiency must be given more precise definition than this. It is not proposed here to discuss methods which might be adopted to secure efficiency; these include the setting up of Price Tribunals for each industry, the right of consumer councils to appeal to such tribunals, and various other measures. The question that is relevant to this survey is by what simple standard should the efficiency of management be judged. Unless there is some fairly easily recognisable gauge, management has no incentive to "hold the ring"; it will take the easy route of syndicalism and be content to exploit the consumer for the benefit of those employed in the industry.

The first essential is that industry shall avoid a loss when subtracting aggregate costs from the aggregate of prices. Professor P. Sargent Florence and Professor Gilbert Walker suggest that a small surplus might be aimed at.\(^2\) The use of the word "surplus" rather than "profit" is important in-so-far as it removes grounds for allegations of exploitation. Under public ownership there is no longer payment of dividends, although old capital is paid interest. One further qualification is that the surplus must not be the result of a high margin on a small output, when a lower margin on a larger output would still have resulted in a surplus. One advantage of breaking even, or slightly more than even, at the greatest aggregate of production, is that it focuses attention on costs. Attacks on profits in the past have sometimes overlooked the fact that high costs have been more frequently responsible for high prices than inflated profits.

There is often more scope for economy in costs than in profits, and under public ownership an increasing surplus due to a reduction of costs will be an indication of efficiency. There will come a time, if the surplus is growing, when prices should be reduced, thereby leading to a fall in the surplus. But the efficiency of the industry will have been amply demonstrated by this sequence of events.

Management clearly enjoys no direct financial gain in the form of dividend from the surplus. But, as under joint stock companies, it has everything to gain in prestige, and the state of the surplus (bearing in mind the qualifications outlined/  

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1. Section 1.  
outlined above) will serve as a barometer by which the Minister of Fuel and Power and the consumer councils can judge how well the administrators and managers in the industry are doing their jobs.

Since 1945 the movement has been in the opposite direction; faced with the need to "break even" under conditions of rising costs the industries have merely raised prices. It is to deal with such a contingency that independent Price Tribunals for each industry are required.

It is not intended to carry this examination of a measurement of efficiency beyond this brief statement of principle. The point to be emphasised is that there must be some pressure upon management from the side of the consumer to counterbalance the pressure coming from the trade unions. A vacuum on either side would be undesirable. It would be deplorable if management were to exploit weaknesses in the trade unions arising from, say, unemployment. Exploitation of the consumer is equally reprehensible, and the requirement of "breaking even" or achieving a small surplus, under the conditions enumerated above, sets a limit beyond which adjustment should not be pushed.

The economic pendulum has swung from consumer sovereignty to producer sovereignty in the last hundred years. In 1853 the consumer was monarch of all he surveyed; producers danced attendance upon his every whim, rushing between alternative employments as in a game of musical chairs. Indeed in Bastiat's world the producer had no independent existence; he was a pale shadow cast by the all-important consumer. To-day the pendulum has swung in the opposite extreme; the consumer is regarded as a sinister figure whose aim is to snatch the shirts from the backs of workers and bread from the mouths of their children. A suggestion that the consumer's interest should be borne in mind is considered in some quarters tantamount to advocating wage slavery or the restoration of the Combination Acts. It is to the credit of the T.U.C. that it has recognised that "producer" and "consumer" are labels concealing the identity of a single person, and has given its support accordingly to productivity drives. But resolutions passed at annual conferences are no substitute for patient day-to-day co-operation at the undertaking level.

Whether or not, from the viewpoint of maximum efficiency, sufficient authority has been delegated to management at the undertaking level is a question that lies outside the scope of this survey. It should be noted, however, that in discussion/

1. In the case of the Electricity Supply Industry, however, charges for electricity have been kept low compared with the increases in costs. (Report from the Select Committee on Nationalised Industries, 29th October 1952, London, HMSO Minutes of Evidence; Paras. 1016-1019).

discussion upon decentralisation in the nationalised industries it is the under-
taking level which is important. The Gas Industry for instance, having adopted
the Heywood Committee recommendations\(^1\), never loses an opportunity of drawing
attention to the autonomy of its area boards as proof of decentralisation, but
there are criticisms from lower formations in Scotland that their hands are un-
necessarily tied. Whether they are tied by headquarters in Edinburgh or London
is a matter of minor importance to the individual manager. When, for instance,
the Deputy-Controller of the Glasgow Division, Mr. E.G. Smith, asked for per-
mission to appoint a technical assistant at a salary of £700 a year, he informed
the Board that he could thereby effect economies in production costs of about
£2,000. His request was refused; Board policy with regard to establishment made
no provision for such an appointment.

It is significant that in spite of the autonomy of the Scottish Gas Board
there is widespread criticism among managers about inadequate decentralisation.
One reason for this, it was alleged, was that the "local authority mentality"
dominated the Scottish Area. The area was controlled largely by the personnel of
the four former municipal undertakings, Edinburgh, Glasgow, Aberdeen and Dundee,
unlike some English areas which had taken over large private companies. There
was consequently, in Scotland, a more cautious and unenterprising approach, and
a rigid interpretation of what the different levels were authorised to do.
According to one officer of the Board this "local authority" approach was hindering
vigorous sales policy. In the Scottish Division of the N.C.B., there are
similar criticisms of centralisation (again, whether in London or Edinburgh, does
not matter much to the colliery manager in Midlothian) but there seems some
justification for the headquarters' argument that managers do not take sufficient
advantage of the authority that is constitutionally accorded to them. Effective
decentralisation, it is argued, must await a new generation of colliery managers
willing and able to assume increased responsibility. This need will be met by
the "Ladder Plan". In the Electricity Supply Industry in Scotland there is less
criticism on the subject of decentralisation.

The importance of decentralisation to industrial relations is that it per-
misses the workers to participate in local decisions which affect their undertak-
ings. No originality is claimed for this observation. We were warned more
than sixty years ago that "it will be necessary for the unit of administration to
be small enough for every citizen to feel himself responsible for its details and
be interested in them; individual men cannot shuffle off the business of life
onto the shoulders of an abstraction called the State but must deal with each
other/

Experience in the Fuel and Power industries since nationalisation has underlined this warning. Without effective decentralisation joint consultation at the undertaking level is largely a sham, and is rightly treated as such. Nothing spreads cynicism among the workers so much as continuous apologies by the manager for his inability to decide issues raised in a consultative committee meeting. Some matters obviously demand reference back along the chain of command, but they should be kept to a minimum.

It has been suggested that decentralisation could be carried a stage further than at present by eradicating certain stages in the hierarchy, thereby enabling more authority to be assumed by the operating unit.

Let us see how these proposals would affect the Coal, Gas and Electricity industries. In coal mining, the area and sub-area headquarters would be eligible for abolition; in electricity, the sub-area; and in gas, the division. At the present stage of planning and developing of the industries these suggestions would not be beneficial to Scotland, with the possible exception of the abolition of the sub-area in the coal industry. There seems to be some needless duplication of functions between area and sub-area headquarters, and in practice colliery managers in Midlothian frequently bypass the sub-area level. What might be done in the South East Scotland Electricity Board is to reduce the number of sub-areas (but this suggestion was put to me by a member of the Board Headquarters Staff who considered the present number excessive), without abolishing this administrative level. As far as the Scottish Gas Board is concerned, the abolition of the division would be most undesirable. It is the existence of the Edinburgh Division, for instance, which is permitting the effective integration of many small undertakings in the neighbourhood of Edinburgh.

It has also been suggested that the national boards in certain industries should be abolished and their functions transferred to Government departments. There is already duplication of work, it is argued, between these boards and the Ministries under which they operate. Henceforth the regional boards would come directly under the Government department; appointment to these boards would remain a ministerial responsibility, and the Minister would plan the general development.

3. This is not the official view of the South East Scotland Electricity Board, which declared that there was "no need to make any important change in administrative structure; the organisation set up in 1948 continued to work well and to meet the expanding requirements of the area." (Fourth Report and Accounts for the year ended 31st March, 1952. Edinburgh: H.M.S.O. Para. 3.)
development of the industry. This policy has been advocated for industries which can be separated conveniently into regions which, once plans and budgets are settled, can be run independently, and where the undertakings in the regions require only limited direction and control. These conditions apply fairly closely to the coal, gas and electricity supply industries. In the case of the two last named industries the abolition of their national boards has been suggested by a former Minister of the Crown. ("If I had got to choose two of the existing public corporation industries for transfer to a State Department, my choice would be gas and electricity. I have a sneaking ambition to do that, but I do not suppose I would be allowed!")

In my opinion it would be unwise at the present time to abolish the national boards in any of the Fuel and Power Industries. They were originally set up with a view to securing freedom from close parliamentary supervision on the one hand and Treasury control over personnel and finance on the other. Neither of these features of British Government are conducive to efficiency and initiative in undertakings of an industrial or commercial character. Recognition of this fact was the impetus behind the creation of the public corporation and nothing that has happened since 1945 has invalidated it. Replacement of the national boards by the Ministry of Fuel and Power would be a movement back to departmental control, and would involve a considerable expansion in the staff of the Ministry to carry out duties formerly performed by the three national organisations. These duties would include such matters as the allocation of sums to reserve, the management of reserve funds, the action to be taken in the industries to reduce operating deficits, the adoption of important new inventions, processes or improvements, and policies on scientific research and development, training and education. It is difficult to see what would be gained in the way of administrative economies by transferring these functions to a government department.

It may be argued that such a reform would provide closer accountability by making the industries more vulnerable to parliamentary criticism. This advantage would, however, be more than offset by the strengthening of a "civil service mentality" in the three industries. The coal industry, for instance, is staffed in key positions mainly by people whose training and experience have been in private enterprise. Any attempt to subject their day-to-day decisions to close parliamentary supervision would be unwise at the present time to abolish the national boards in any of the Fuel and Power Industries. They were originally set up with a view to securing freedom from close parliamentary supervision on the one hand and Treasury control over personnel and finance on the other. Neither of these features of British Government are conducive to efficiency and initiative in undertakings of an industrial or commercial character. Recognition of this fact was the impetus behind the creation of the public corporation and nothing that has happened since 1945 has invalidated it. Replacement of the national boards by the Ministry of Fuel and Power would be a movement back to departmental control, and would involve a considerable expansion in the staff of the Ministry to carry out duties formerly performed by the three national organisations. These duties would include such matters as the allocation of sums to reserve, the management of reserve funds, the action to be taken in the industries to reduce operating deficits, the adoption of important new inventions, processes or improvements, and policies on scientific research and development, training and education. It is difficult to see what would be gained in the way of administrative economies by transferring these functions to a government department.

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Parliamentary scrutiny would lead to inordinate caution, and a tendency to refer every decision to their superiors. These tendencies already exist in the industry, and our concern must be to reverse them. The extension of direct Parliamentary accountability would be a step in the wrong direction.

Furthermore, departmental control would involve the Government directly in negotiation and consultation with the unions in the three industries, and in all disputes arising therefrom. It is true that the Government cannot avoid ultimate concern in negotiating matters affecting such important basic industries as coal, gas and electricity. Indeed, there has been clandestine Government pressure upon the boards on several occasions since nationalisation. According to an official of the Scottish Division of the N.C.B.: "Fear of Ministerial interference makes the N.C.B. pull its punches. On some issues the N.C.B. has capitulated to claims that were unreasonable". The present chairman of the N.C.B., Sir Hubert Houldsworth, Q.C., D.Sc., has, however, deplored intervention in conciliation matters, even in the form of questions from Members of Parliament. "I am in an industry which is somewhat turbulent at times, and I should deplore very greatly questions relating to stoppages of work, disputes or wage negotiations when the matters were actually taking place. We are taunted at times by the Press that we do not make a statement in reply to a statement which may be put out by the strikers or by the unions. My own experience is that the way to continue a strike longer than one need is to have publicity about it. The less said the better at the time, and so too in wage negotiations". Sir Hubert also deplored the permitting of parliamentary questions on the grievances of individual employees, including such a question as the de-motion of a colliery manager. "It is a matter, of course, which might well be discussed at his request by his particular union with us, but I cannot conceive that an industry which ... has to be run efficiently could be carried on if people who are misfits are continued in their particular jobs". Sir Hubert went on to point out that the boards would be afraid to take drastic steps to improve efficiency in this way if such decisions were going to be discussed on the floor of the House of Commons.

But why, it may be asked, cannot the Ministry take over the financial and technical responsibilities of the boards while renouncing responsibility for industrial relations by devolving negotiating functions upon the regional boards? The answer is simply that this solution would not be practical politics. As we have seen in previous chapters, the establishment of national negotiating machinery/

2. Ibid. Page 117, Para. 1024.
machinery and national wages structures in the coal, gas and electricity industries was the culmination of many years of agitation by the trade unions, and these gains would not lightly be surrendered. Any attempt to devolve negotiating functions upon the regional boards would be fiercely resisted by the unions and would only serve to open wounds long since healed.

A compromise solution, if the national boards were abolished, would be the combination of the regional boards into a national federal body for negotiating and consultative purposes only. This national body in each industry would have powers to draw up agreements with the unions. This arrangement would probably be acceptable to the unions but it would achieve nothing that is not possible under existing arrangements. The present national boards satisfy the demand of the trade unions for machinery at the national level, without involving the government directly in negotiating procedures. Although the Fuel and Power Industries cannot be afforded complete immunity from government influence in the province of negotiations, this influence should be minimised.

In recommending the retention of the national boards it is not my intention to argue that, as at present constituted, they are the most efficient form of industrial government. It might be an advantage, for instance, to reconstitute the N.C.B. on the lines of the Gas Council. But nothing would be gained by the outright abolition of the boards and the introduction of direct departmental responsibility for the industries.

It is certainly not suggested that industrial relations in the three industries now fulfil the prescription of Doctor Pangloss - all for the best in the best of all possible worlds. Indeed, the purpose of examining industrial relations under the various headings set forth in preceding pages was to make possible detailed criticism. In examining the evidence of many administrators, managers, workers and union officials in these industries the benefit of any reasonable doubt has usually been withheld, and official statements have been treated with extreme caution. Policy statements by board officials have always been checked and verified against the evidence of employees who fell within their scope and could confirm their accuracy. The reaction of employees, when asked to confirm such statements, has ranged from nods of approval to incredulous laughter. Indeed, in his determination not to be misled, the writer may have detected special pleading where none existed, and some of the criticisms will, in view of the transitional stage of these industries, appear to both management and workers as ungenerous. But industry is always undergoing transition and if judgment is suspended until the attainment of some static equilibrium it will never/
never be delivered.

Nevertheless, in viewing these industries in historical perspective, one’s judgment must be qualified by optimism. What for instance would be the verdict of the Commissioners who visited Midlothian in the eighteen forties if they could return to see the collieries to-day? What would be the verdict of Commissioner R.H. Franks whose emotion at what he saw in 1842 continually breaks through the stern official language of his report? Or of Dr. Scott Alison who told Mr. Franks: "When I regard the combined operation of the direct and indirect influences of the occupation of the collier upon the goodly human fabric, in the deterioration of physical condition, in the depravity and heinousness of its moral nature, in... disease and suffering and misery, and in the wholesome destruction of human life, I feel appalled with the contemplation, and question much whether the working of coal produces more happiness than misery."¹

It may be argued that, over a period as long as this, comparisons have little value. But they teach us one valuable lesson: that few problems of industrial relations, given the time and will, are insoluble. How considerably less formidable seem the problems that confront us to-day compared with those of our ancestors. With the banishment of brutality, squalor, and hatred from the coal fields we have no cause to despair of solving those problems that remain.

Furthermore, the eradication of the worst evils should make the solution of lesser ones progressively easier, until the main evil that remains is only the suspicion in men’s minds. "The ultimate issue with which we are thus confronted is an issue which transcends the difference between classes, or that between parties, or indeed any difference which is merely a difference of parts or sections of the community. It is an issue between two different spirits, two different tempers of mind — the spirit and temper of accommodation and the spirit and temper of intransigence... Democracy belongs to the mental world inspired and controlled by the temper of accommodation — a world that is patient and tolerant of differences, accepting them as the necessary ingredients of unity, and trusting them to achieve it by the methods of voluntary adjustment."²


APPENDIX NO. I(a)

Casualties caused by "Falls of ground" in selected years.

(Based upon the Annual Reports of the Secretary for Mines, Ministry of Fuel and Power Statistical Digests and Provisional Statement of Accidents)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Persons Killed</th>
<th>Number of persons killed per 100,000 employed</th>
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<tr>
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<td>470</td>
<td>104.7</td>
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<tr>
<td>1895</td>
<td>447</td>
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<td>537</td>
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<td>239</td>
<td>43.0</td>
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<td>Number of persons killed per 100,000 employed*</td>
</tr>
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<td>------</td>
<td>--------------------------</td>
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</tr>
<tr>
<td>1950</td>
<td>504</td>
<td>68.8</td>
</tr>
<tr>
<td>1951</td>
<td>492</td>
<td>67.0</td>
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Report of Proceedings at Meeting of the CONCILIATION BOARD, representative of the NATIONAL COAL BOARD (Scottish Division) and the NATIONAL UNION OF MINEWORKERS (Scottish Area) and the SCOTTISH COLLIERY ENGINEMEN, BOILERLemen AND TRADESMEN'S ASSOCIATION held within the North British Station Hotel, Edinburgh, on Monday, 31st July, 1950, in re EASTHOUSES COLLIERY:

Claim on behalf of 10 Packers in Meco-Moore Section for Guaranteed Wages for 7th April, 1950, and Bonus Shift for that week.

Present - Mr. John Cameron, D.S.C., K.C., Independent Chairman.

On behalf of the National Coal Board - The Earl of Balfour, Messrs. G.R. Buchanan, John Colthart, H.R. King, John Park, L.R. Milligan, and Mr. James Barbour, Joint Secretary, with Mr. James Barrowman in attendance.

On behalf of the National Union of Mineworkers (Scottish Area) and the Scottish Colliery Enginemen, Boilermen and Tradesmen's Association - Messrs. Abe Moffat, A.K. Davidson, J. Miller, Alex. Moffat, D. Sim, R. Smillie, J. Tennyson, and John Wood.

The CHAIRMAN - Well, I take it the first matter on the Agenda is The Easthouses Colliery. Who begins?

Mr. ABE MOFFAT - I do. Well, Mr. Chairman, if you have gone through the Minutes we have submitted, you will find that there is a question of principle involved in this case as to what really constitutes a seven days' notice. We had it before the Disputes Committee, and we failed to reach agreement, and the matter was, therefore, remitted to the Umpire under our Pit Conciliation Agreement. He upheld the opinion of the Coal Board that it was not a pit question but was one of general principle, hence the reason why it is submitted here. I say that because the claim for wages is actually a secondary issue; it is a question of principle. If we decide the principle the other thing follows automatically. Therefore, my remarks will simply be confined to what really constitutes the seven days' notice. I would draw your attention to the fact that we have an agreement covering this point dated 19th March, 1948. A copy of that will be before you, I presume. The only part I want to refer you to is, of course, clause 2, because these are really the circumstances in which/
which the submission has arisen. It reads that a workman shall not terminate his employment except by notice in writing to the Management of not less than seven days of termination of his employment. Of course, clause 1 is something similar, only it is applying to the managerial side of the case. The point at issue is "shall be not less than seven days"; that is the point emphasised in the Agreement. The workmen handed in their notices on Friday morning, 31st March, after completing work on the night-shift. We contend that the notice does not expire until the end of the working shift on the seventh day, that is to say, the end of the working shift on Friday, 7th April. It so happens that the workmen were on the day-shift that week.

The CHAIRMAN - Just a minute. Do not go too fast. Notice was given on Friday morning, 31st March, on completion of the night-shift?

Mr. ABE MOFFAT - That is right.

The CHAIRMAN - And your contention is that it did not expire until when?

Mr. ABE MOFFAT - The end of the working shift on the seventh day, that is to say, the end of the working shift on Friday, 7th April, when the workmen were on day-shift.

The CHAIRMAN - That means the end of the day-shift on 7th April.

Mr. ABE MOFFAT - Yes. Now, the men came out that morning, on 7th April, on day-shift, but they were sent home, hence the reason for this dispute. The Coal Board claim, as you will note in their submission, that because notice was handed in at 7 a.m. on 31st March, it should end at 7 a.m. on 7th April. This has never been so on any previous occasion, and this Agreement has been in operation now for two years. It so happens that the Coal Board submit more notices than we do, and that can be understood, because of the question of closures, and the consequent re-organisation, and so on, therefore it is an obligation on the part of the Board to give seven days' notice. We have seldom given seven days' notice by the authority of the Union. My recollection is that we have only authorised two during that period, one in Burghlee and one in Thinaacres, and there never has been any dispute between us as to what constituted the seven days, because in our experience the notice did expire on every one of these occasions at the end of the working shift on the seventh day.

The CHAIRMAN - Were these men on the night-shift or the day-shift?

Mr./
Mr. ABE MOFFAT - Some on the night-shift and some on the day-shift. We had no hesitation in these circumstances in carrying this out and accepting this interpretation by the Coal Board. In this case our contention is verified, as I say, by practical experience in the coalfield, and, secondly, by the advice given by the Labour Department itself, because when this case was raised in the initial stages, before it was negotiated at the pit or the Joint Disputes Committee, the Labour Department of the Coal Board sent a letter confirming what we said. That letter says: "With reference to your telephone conversation with Mr. Colthart last Saturday morning regarding the above Agreement, I have to say in regard to the point you raised that the phrase 'not less than seven days' notice' therein necessitates a notice given on, say, Thursday of one week being effective at the close of work on the following Thursday." That, I say, simply confirms what I have said in this case, and it is what has really been the practice in the coalfield.

The CHAIRMAN - What is the date of the letter?

Mr. ABE MOFFAT - The date of the letter is 11th April.

The CHAIRMAN - Of this year?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - With reference to what?

Mr. ABE MOFFAT - With reference to this dispute we are discussing.

The CHAIRMAN - May I have a copy?

Mr. ABE MOFFAT - Yes. Now, outside that, we contend that if the Coal Board proposal was accepted it would not comply with the Agreement, that it would be less than seven days, and I will endeavour to show it to you. The Coal Board, in the first place, claim that winding time is part of the working shift. Rightly or wrongly, they have claimed that in other cases they have always contended that the winding time is part of the working shift. Now, the winding time in this colliery is 45 minutes, therefore the men commence to go down the pit in this instance at 6.15 a.m., so if they were to complete seven days' notice they would at least be entitled to go down the pit for three-quarters of an hour to complete the seven days as laid down in the Agreement, because the Agreement says there shall be not less than seven days' notice. Now, outside of that, the proposal put forward by the Coal Board would be impractical in the coalfield, whether notice was given by the/
the workmen or the Coal Board. For example, if we leave out this case and say
the Coal Board or the workmen give notice on a particular day at 10 o'clock -
any week day - then according to the Coal Board's interpretation the notice
would terminate at 10 a.m. on the seventh day. Now, that would be, Mr. Chair-
man, in the middle of the working shift. That would be impracticable in a
pit, and the Coal Board, as a matter of fact, say in their own statement they
were not prepared to allow these men to go down this pit on this occasion even
although they had three-quarters of an hour technically to complete the seven
days' notice. Therefore, if they were not prepared to allow the workmen to go
down to complete 45 minutes, there would be less chance of the Coal Board
allowing a man to go down the pit to complete, say, a half shift. Not only
that, I say it is impracticable, because it might mean the whole of the pit
standing to allow such a man to get out of the haulage roads, and I am quite
sure the Coal Board itself would not condone such an action taking place.
Therefore, we say it is only a question of getting smooth working arrangements
whereby we will have a proper Agreement under which no one will be under any
dubity and there will be no practical difficulties in operating it, and we
submit that the clear-cut way is to say that the notice shall expire at the end
of the working shift on the seventh day. That, in our opinion, is the only way
to guarantee not less than seven days' notice as laid down in the Agreement,
and, in addition, it is the only way to make it practicable, because, as I have
already explained to you, if you go by time it will create a very bad situation
in the collieries in the application of the seven days' notice as laid down by
the Coal Board. Furthermore, as I have already explained, we have had no dis-
agreement on this matter, and it has been operating since March, 1948. Never
on one occasion has it been challenged, and in every case without exception
the notice has expired at the end of the working shift on the seventh day.
That is our case.

The CHAIRMAN - Thank you. You say the end of the working shift.

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - But, as I understand your argument, there are two shifts, the
day-shift and the night-shift.

Mr. ABE MOFFAT - That is right. There can be two shifts.

The CHAIRMAN - And in this case there were.

Mr. ABE MOFFAT - Yes.

The/
The CHAIRMAN - You will forgive my ignorance asking this question, but does the night-shift always begin at a given time?

Mr. ABE MOFFAT - Yes, the night-shift always begins at a given time, and so does the day-shift. It might be 9.15 at one pit and 9.30 at another.

The CHAIRMAN - I follow that. You say there is no uniform hour throughout the whole region or the whole district?

Mr. ABE MOFFAT - No.

The CHAIRMAN - It varies within certain limits from pit to pit?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - In this particular pit when did the night-shift begin?

Mr. ABE MOFFAT - I would not be sure about that.

Mr. ALEX. MOFFAT - There is a local agreement. I am not certain what it is. It is either 10.30 or 11. I am not sure of the exact time.

Mr. ABE MOFFAT - There will be no dispute about that.

The CHAIRMAN - What is the time of the commencement of the night-shift in this particular pit?

Mr. BUCHANAN - The men actually arrive on the surface at a quarter to seven in the morning. There is a rota system.

The CHAIRMAN - So that they come to the surface at 6.45 and the day-shift starts at 6.15 so as to get them down to the pit bottom for seven o'clock. Is that right?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - And the day-shift ends when?

Mr. ABE MOFFAT - 2.30

The CHAIRMAN - Then how do you interpret "day" under clause 2? Is it a 24-hours day?

Mr. ABE MOFFAT - So far as we are concerned it never has been interpreted.

The CHAIRMAN - It is your contention - it may be right or wrong - that each day is a complete cycle of itself. Is that the argument?

Mr. ABE MOFFAT - That is right.
The CHAIRMAN - And if you give notice of termination at the end of, say, the night-shift - take this particular case of 31st March - that notice becomes effective at the end of the day-shift on the seventh day following thereafter?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - Now, if that notice had been given at the beginning of the night-shift, 10.30 p.m., shall we say, on the 30th of March, what would have been the position?

Mr. ABE MOFFAT - It would be finished on the 6th.

The CHAIRMAN - It would have finished at the end of the day-shift on the 6th?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - What happens between 2.30 and 10.30 in this particular pit? What shift is on then?

Mr. ABE MOFFAT - It could be the afternoon shift in one instance.

The CHAIRMAN - Why does your argument stop short at the day-shift?

Mr. ABE MOFFAT - It does not stop short at the day-shift. My argument applies to every shift, whether it be the night-shift, day-shift or back-shift.

The CHAIRMAN - Supposing on 7th April there is a day-shift which ends at 2.30 in the afternoon, and there is a back-shift as well, when would it begin?

Mr. ABE MOFFAT - At 2.30.

The CHAIRMAN - And they would go on to when?

Mr. ABE MOFFAT - Nine.

The CHAIRMAN - Nine or ten?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - Well now, if your argument is sound, why don't you say it goes on to the end of the back-shift?

Mr. ABE MOFFAT - It would. That is why we are saying, irrespective of the shift. It would end at the completion of the working week at the end of the 24 hours.

The CHAIRMAN - With the completion of the last shift worked which is within the 24 hours?
Mr. ABE MOFFAT - Yes. If the men had continued on the night-shift the following week, let us see how it would have applied. The men would have worked Sunday, Monday, Tuesday, Wednesday and Thursday morning would have been the end of the working shift, but it so happens they went on the day-shift, and it so happens they would have worked five shifts the following week. In this case they commenced on the Monday on the day-shift and worked Monday, Tuesday, Wednesday and Thursday. They only worked four shifts in that week.

The EARL OF BALFOUR - They would still work Friday the week before?

Mr. ABE MOFFAT - Yes, they would work Friday night the week before, which is an overtime shift.

The CHAIRMAN - Is that your argument at this stage?

Mr. ABE MOFFAT - Yes.

The EARL OF BALFOUR - Well, Mr. Chairman, I agree that this concerns Clause 2, which is, I submit, perfectly specific. It is not less than seven days' notice. In our view the words "not less than" were put in for the convenience of either party wishing to give longer notice than seven days. There have been cases where we have been closing a colliery or closing a section of a colliery where we have given as much as a month's notice. That is to suit the men's convenience where we can see a long way ahead. That is our interpretation of the meaning of these words. Notice could be given during the course of a shift. As Mr. Moffat has said, it might be 10 a.m. in the morning or it might be at the end of a shift or at the beginning of a shift. Now, obviously, we have got to be practicable, and I think the Board would agree immediately that if notice was given during the course of a shift, say notice had been given at 10 a.m., the only practical way of interpreting that would be to take seven days' notice of 24 hours from the termination of the shift during which notice was given. But these were not the circumstances in this particular case. Mr. Moffat said that notice was given at 7 a.m. I think the material point is that it was not given later than 7 a.m., and I think we have a signed statement from the time-keeper.

Mr. BUCHANAN - I have the time-keeper here to give evidence if necessary.

The CHAIRMAN - Does very much turn on that?

The EARL OF BALFOUR - No, I do not think so. The point is that they were in before 7 a.m. Mr. Moffat referred to the fact that there has been no previous/
previous dispute over this matter, and I think it is not surprising, because I should doubt if similar circumstances have ever arisen. It is the general practice for the men to work regularly either on the day-shift, back-shift or night-shift. It is only in certain collieries we have this turn over either from night-shift to day-shift, as it was in this case, or sometimes from back-shift to day-shift, and so on. In this case it was from night-shift to day-shift. Mr. Moffat went on to argue on Mr. Barrowman's letter. Mr. Barrowman's letter may have arisen out of this case when the full circumstances of the case were not reported to the Labour Department, and I would submit his letter is only a general guidance which would normally be applicable. I have a copy of the letter here. May I read it once again? "With reference to your telephone conversation" - and I want to point out it was a telephone conversation and you cannot get the full circumstances over the telephone - "I have to say that in regard to the point you raised the phrase 'not less than seven days' notice' therein necessitates notice being given on, say, the Thursday of one week being effective at the close of work on the following Thursday." Our contention is that that letter was written under the impression that the men were on the same shift the one week as they were on the following week. In fact, that letter was written on the general advice of our legal adviser to whom that point had been put, and when the full particulars of this case were given he upheld the management's contention. I do not think I need go into the details. Mr. Moffat has made a very important point, I think, about this winding time. I have already indicated in our view that if notice had been given after seven o'clock we should have had to hold that it was during the shift and that therefore it could not be said that the seven days operated after 24 hours. Our contention is that the meaning must be seven days of 24 hours, and for practical application it would have to be applied from the end of the shift. Mr. Moffat argues there is the winding time here, and, as the Coal Board has always held, that the winding time is part of the shift, therefore 7 a.m. was in the shift and they would have had the right to go down when they were refused permission - that was on the 7th of April - for three-quarters of an hour if we were applying it literally. We dispute that on two bases. First of all, while it is true that the N.C.B. always hold that a shift is a shift plus one winding time, the N.U.M. have not accepted that interpretation, and that point has at the moment, by agreement between both sides, been referred to London, and no ruling has yet been obtained on it. But even if/
if the ruling were in support of the general N.C.B. contention that the shift included seven hours plus one winding time, we do not think that that would affect the particular case before you, because, as Mr. Buchanan interjected to say, there is at this particular colliery a rota system which is worked in agreement with the Union. We dispute, in fact, that it is correct to say that the men were entitled to go down the pit at 6.15, because under the rota system the first trip leaves the surface at 6.15 a.m. with the first set of strippers and their attendant oncost workers, the second trip leaves the surface at 6.35 and contains the second set of strippers and their respective oncost workers, while the third trip leaves the surface at 7 a.m. with the remainder of the workmen, including the packers who are in question on this particular occasion. It is clear, therefore, that the packers would not under any circumstances when on day-shift have started to descend until 7 a.m. Therefore, quite irrespective of the winding time, we maintain that there are seven clear days of 24 hours in accordance with this Agreement. Now, the actual wording of the men's notice was as follows to the manager of this colliery: "Notice of termination of employment. I hereby give you seven days' notice of the termination of my contract of employment at this colliery," and then it is signed. If these men had wanted to work to the end of Friday, we submit that they could have done so by adjusting the terms of that notice. This is the printed notice which is normally supplied to the men. It might not have occurred to them, but if there was any doubt it would have been open to them to adjust the terms of the notice, but, if it rested on the seven days' notice, seven days must be presumed, I think, to be seven days of 24 hours unless it happens in the middle of a shift when we have to consider it as operating from the end of the shift. We are in some doubt as to whether if the men had been permitted to descend on the day-shift of the 7th that would not have meant that by tacit agreement they were re-employed and that therefore a further seven days' notice would have been necessary. That point is not material for the case, but it is one we have to consider if we are to adjust this for a clearer interpretation of it, but we do hold that it is quite clear that this refers to days and not to shifts. Nevertheless, even if you look at it on the basis of the shifts, these men came up and gave their notice just before seven on Friday, 31st March. They worked Friday night-shift and on Monday to Thursday day-shift. They therefore worked five shifts after handing in their notice, and that is the normal week's work. We feel that the contention that they should have worked on the Friday day-shift, in which case they/
they would have qualified for the bonus, is rather a dangerous one, because it might then be held that they had to be normal working days. It might be held that Saturdays and Sundays were not included. Supposing a man was on a constant shift, which is the normal case here, and supposing he handed in his notice, let us say, on coming off night-shift on Thursday, I am assuming he would normally work night-shift on the Friday as one of his normal shifts, and he would still be working night-shift the following week, and he would have had one shift in one week and five shifts in the next week before the termination of his notice. Whereas, if our interpretation is correct, if he gives notice in the middle of his working week, whatever his shifts are, he would be bound to be disqualified for the bonus in the succeeding week, because it would be impossible for him to put five of his regular shifts in in that week.

The CHAIRMAN - Take a Thursday case.

The EARL OF BALFOUR - May we take a Wednesday case first, because that is the clearest of all? Let us take a man working a day-shift, say, starting at 7 a.m. normally, and supposing he handed in his notice just before 7 a.m. on the Wednesday day-shift. He would work Wednesday day-shift, Thursday day-shift, and Friday day-shift in that week. He might work an overtime shift on the Saturday. I am not concerned with that. Then he would work Monday day-shift and Tuesday day-shift. Therefore, clearly in that week he would not have got in his five shifts and therefore he would not get his bonus in the second week.

The CHAIRMAN - That is the question of bonus. I am cutting out the question of bonus altogether. Your view is that his five shifts would complete the seven days' notice, because if he was to work the next day, the following Wednesday, that would be giving him an eighth day.

The EARL OF BALFOUR - Yes.

The CHAIRMAN - I follow that. Take the case of a man on night-shift. He gives his notice of termination of contract just before 7 o'clock on Wednesday morning. He would work the night-shift on Thursday night, night-shift on Friday night, Monday, Tuesday and Wednesday, and that is him finished. That is your argument?

The EARL OF BALFOUR - Yes.

The CHAIRMAN - The question of bonus does not come into the question of the interpretation/
interpretation of this Agreement?

The EARL OF BALFOUR - No.

The CHAIRMAN - I think it is an ancillary question.

The EARL OF BALFOUR - Yes.

Mr. BUCHANAN - I do not think there is anything further to add unless you wish to put the rota system before the Chairman? (Hands in copies of Notice.) This is a Notice posted by the Miners' Union themselves on the pithead drawing attention to the rota system.

Mr. ALEX. MOFFAT - I have never seen it.

The CHAIRMAN - Might I see the document first of all before we have any discussion as to its value? Who is this signed by?

Mr. BUCHANAN - Mr. Methven. It is undated, and Mr. Methven left the colliery about six months ago.

The CHAIRMAN - Do you want to say anything in reply?

Mr. ABE MOFFAT - Yes, there are one or two points. First of all, I must explain this Agreement for the seven days' notice was not introduced into this part of the coalfield because of closures; as a matter of fact, it was introduced not only to the Lothians but into Lanarkshire, Stirlingshire and Ayrshire because of the numerous disputes we had over dismissals of workmen by the Management or workmen leaving at a day's notice, and we both thought it wise, in order to regularise this, that it would be far better if before men could leave their employment or before men could have their employment terminated there should be seven days' notice, and these were the circumstances under which this Agreement was introduced.

The CHAIRMAN - Did I not have this Agreement to deal with before?

Mr. ABE MOFFAT - Yes. We are not discussing an Agreement that exists only at this particular pit at all; what we are discussing is an Agreement that covers everyone in the coalfield. If you take the points put by Lord Balfour to-day, I think they more or less strengthen what the Union has suggested, because he says if the notice was given after seven they would accept it as during the shift. You will notice 7 o'clock is not part of the night-shift by any means, and I do not think anyone will argue that 7 a.m. is not part of the day/
day-shift. As a matter of fact, we go further back and say 6.15 is the commencement of the day-shift. If you take Lord Balfour himself, he says if notice was given after 7 a.m. they would have no hesitation in accepting that interpretation, and that seems to me to strengthen the claim that has been put by the Union on this occasion. Now, as regards the men having any doubt on the interpretation, the men had no doubt whatever. That is why the men proceeded to their work on the Friday morning. On the other hand, if the Management had thought that there was any doubt about when the notice terminated then they had got seven days to consider this, but during those seven days there was no approach made to the workmen whatsoever to tell them that their employment expired on Thursday, 6th April, at the end of the day-shift.

The CHAIRMAN - This question would never have arisen had there not been a change from night-shift to day-shift.

Mr. ABE MOFFAT - This claim would not have arisen had there been no claim for a bonus shift.

The CHAIRMAN - That is as it may be, but am I right in thinking if the men in question had been continuously on the night-shift the question would not have arisen?

Mr. ABE MOFFAT - No, because that would have been the men's working shift on the seventh day and there would have been no dispute about that. You are absolutely correct. As I say, if there had been no claim for a bonus shift, I am quite positive there would have been no question of a dispute between the Union and the Coal Board, but again I must bring out that if we go on this seven days at 24 hours it will create the greatest anomalies, and that is what is suggested by the Coal Board, in the operation of the seven days' notice. As a matter of fact, in Fife we have been operating not a seven days' but a 14 days' notice since before I went into the pit - and that is a good few years past now - and there never has been one dispute in the Fife coalfield as to what those 14 days meant.

The CHAIRMAN - I am afraid that might be because this point did not arise before.

Mr. ABE MOFFAT - That is probably quite true. As I say, outside the bonus shift, once an agreement is reached as to what constitutes the seven days' notice, then it is plain sailing for both sides, but if it is going to be seven days of 24 hours then all I am saying is that it will be the Board that will be the greatest sufferers, because it will create untold difficulties for them.
them. As a matter of fact, it will be impossible to put it into operation. In addition, every notice that has been given by the Coal Board or the workmen and only in two pits did we give notice - has terminated on the working shift on the seventh day, and how we can get any change in this practice which has been in operation is beyond me.

The CHAIRMAN - I want to get your view on this. The question has not arisen in previous cases because there has been no change of shift work by the men within the currency of the week. Is that so?

Mr. ABE MOFFAT - No, you can rest assured in the issuing of these notices this complication has also arisen elsewhere. In the Lanarkshire coalfield you have this change of shift.

The CHAIRMAN - Within the seven days?

Mr. ABE MOFFAT - Yes, that is quite a common occurrence in a colliery.

The CHAIRMAN - How do you put your argument then? If you take the ordinary interpretation of seven days, leaving out of account the Mining Agreement, seven days would be seven times 24 hours.

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - And if you or I said seven days' notice, and I gave you notice at 12 o'clock on Monday, presumably the notice would become effective at 12 o'clock on the following Monday?

Mr. ABE MOFFAT - That is correct, and in this case it would have been 7 a.m.

The CHAIRMAN - Now, does your argument involve importing into the Agreement words something to the effect that this shall not be seven days of 24 hours, but shall be seven working days according to the shifts worked by the person giving notice of termination during his week. Is that right?

Mr. ABE MOFFAT - No. My first point is, according to the Agreement, there shall be not less than seven days' notice in any case, therefore you must have the full seven days. Technically speaking, if we go on seven days at 24 hours these men have not had their full seven days' notice, because it did not expire until 7 a.m. on the 7th of April. That is my point.

The CHAIRMAN - That is your first point?

Mr. ABE MOFFAT - Yes.
The CHAIRMAN - Let us just pause there a minute. Lord Balfour's retort to you would be that that is impracticable, therefore you have got to find some other method.

The EARL OF BALFOUR - What if it is in the middle of a shift?

The CHAIRMAN - Assume 7 a.m. was in the middle of the shift, even although the man was not working.

The EARL OF BALFOUR - Supposing this notice was given at 10 o'clock, that would not be on his shift; he would not be working at 10 o'clock, but that would be in the middle of the day-shift. Under these circumstances I think to be practicable it would have to become operative at the end of the shift.

The CHAIRMAN - If he was changed from a night-shift to a day-shift worker there would be no chance of him working a full day's shift on the termination of the notice.

The EARL OF BALFOUR - No. I think under our interpretation he would normally get five shifts after the notice, which is what they did get. I am sure Mr. Moffat is mistaken on this, that the Friday night was an over-time shift; I am sure that the Friday night was a regular shift.

Mr. ABE MOFFAT - You are quite right on that.

The EARL OF BALFOUR - So that if these men did get five full shifts it was the normal seven days' work after handing in their notice.

Mr. ABE MOFFAT - I am not worried about the five shifts. Supposing it was three shifts, it does not alter the point I am making. For example, a man can be idle three out of five and it would not alter the notice.

The CHAIRMAN - Do I understand your position to be this, that when you get notice given at the end of a shift the notice does not become operative in any case until the termination of the last working shift on the day on which the notice falls to terminate? Is that right?

Mr. ABE MOFFAT - That is right.

The CHAIRMAN - So that it does not matter whether or not the notice is given within a shift or at the termination of a shift?

Mr. ABE MOFFAT - That is correct.

The CHAIRMAN - The seventh day is to be a complete day of the working shifts ending within the 24 hours. Is that your interpretation?
Mr. ABE MOFFAT - Not within the 24 hours.

The CHAIRMAN - Surely.

Mr. ABE MOFFAT - No, not within the 24 hours, because that would mean the end of the afternoon shift in all cases.

The CHAIRMAN - Yes, it would. Let us get away from the particular case and get down to the interpretation. Why do you bogle at the afternoon shift?

Mr. ABE MOFFAT - I do not bogle at the afternoon shift if the man is on the back-shift, but if the man is on the night-shift or day-shift then it is necessary to continue until the end of the cycle of shifts.

The CHAIRMAN - I follow that. Supposing he had been put on the back-shift instead of on the day-shift your argument would have had to include the back-shift?

Mr. ABE MOFFAT - Yes, if they were on the back-shift.

The CHAIRMAN - Does that not mean that to be logical your interpretation of this Agreement, as a matter of principle, is that it must be 24 hours, and the seven days' notice means seven days' which includes all those shifts which are in fact being worked and are due to terminate within the seventh day?

Mr. ABE MOFFAT - Subject to the workman being on that shift.

The CHAIRMAN - It does not matter, does it?

Mr. ABE MOFFAT - Oh, yes.

The CHAIRMAN - It does not matter in principle, but it does matter to the workman, because if he is on the shift he will be paid for it.

Mr. ABE MOFFAT - It matters in principle, too.

The CHAIRMAN - Why?

Mr. ABE MOFFAT - I will give an example. A man could be on the night-shift as his ordinary shift - it was not in this case so we will forget about this case - therefore the Management or the workman might have to work an overtime shift on the back-shift and we would be claiming in that case he was entitled to the benefit of going to the end of the back-shift. But that is not what our intention is and not what our claim is. If a man was on the night-shift it would end on the working of the seventh shift. If the man was on the day-shift it would end on the working of the day-shift. If a man was on the back-shift it/
it would end at the end of the back-shift on the seventh day. It does not follow that on any occasion they would be entitled to work to the end of the afternoon shift.

The CHAIRMAN - I appreciate that, but where do you get it in the wording of Clause 2?

Mr. ABE MOFFAT - You do not get it in the wording of Clause 2. Even these men have not been allowed to complete their seven days. It is "not less than seven days" this Agreement says. Lord Balfour says in his statement that if the notice was given after 7 a.m. they would accept that, and then he says that 10 o'clock cannot be the middle of his shift. Now, that is not correct. You could have a day-shift worker who was working from six to ten. He can give his notice, say, at 10 o'clock on that occasion, and if you apply the straight 24 hours you take that man into the centre of a working shift, and we rightly or wrongly contend that the smoothest arrangement is the way that we suggest.

The CHAIRMAN - I think I am right in understanding Lord Balfour's argument that if the notice is given within a shift you would say from the practical point of view the 24 hours of the seventh day must run over the actual 24 hours. He includes the remainder of that particular shift.

The EARL OF BALFOUR - It seems to us there are only two points you can fix exactly, the commencement of the shift or the end of the shift. If it is in the middle of the shift obviously you go to the end of the shift for the point from which you measure, and you would have to do that to make it practicable.

The CHAIRMAN - Let me see how far you disagree if I can. Am I to understand that when the parties who negotiated this Agreement thought of days they were thinking of working days split up into so many shifts?

The EARL OF BALFOUR - I do not think so. I think it is perfectly clear that you have to have some clear-cut time from which it operates. It must either be the beginning of a shift or the end of a shift. You would not want a man to work half a shift to complete his seven days. That is why this rota system may have some significance. Mr. Moffat does not seem to think it does. If, in fact, the shift began at 6.15, then I think there would be some force in the Union's argument that seven o'clock was already in the middle of the shift or during the shift, but these particular men never descended the pit until seven under the rota system, and therefore if their notice happened to be handed/
handed in before seven it was quite clear it was from the beginning of that shift that the notice should be effective.

The CHAIRMAN - So that both sides agree that if the notice is given during the course of a shift there is no doubt the notice runs on to the termination of the equivalent shift.

The EARL OF BALFOUR - Yes.

The CHAIRMAN - I take it Mr. Moffat would agree to that?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - But you disagree as to what happens if the notice is given at the end of a shift. Mr. Moffat says if it happens to be given within the calendar day, 1st April, then it becomes effective at the end of the last workable shift seven days thereafter. That is his argument.

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - And you say no, it ends at the end of the equivalent shift on the seventh day?

The EARL OF BALFOUR - That is right.

Mr. ABE MOFFAT - There is just one other point. When I said that the Coal Board did not permit the person to go down the pit because his notice terminated at seven o'clock, I think Lord Balfour more or less said that was not the position. Is that right?

The EARL OF BALFOUR - No.

Mr. ABE MOFFAT - I said the Coal Board did not allow the men to go down because their notice terminated at 7 a.m.

The EARL OF BALFOUR - Yes.

Mr. ABE MOFFAT - I was going to refer you to their minute.

The EARL OF BALFOUR - I misunderstood you. I thought you were going back to 6.15.

Mr. ABE MOFFAT - It is said here: "It was contended from the Board's side that the men had given seven days' notice of termination of their contract of employment. Even if there was substance in Mr. Moffat's argument with reference to winding time, the Management were not entitled to allow them down because the notice expired at 7 a.m. on the following Friday."
The CHAIRMAN - Do you want to say anything more?

Mr. ABE MOFFAT - No.

The CHAIRMAN - I just want to put one point to you. You said "not less than"; you emphasised the words, "not less than seven days' notice" as supporting your contention?

Mr. ABE MOFFAT - Yes.

The CHAIRMAN - Did you notice in the formal printed notice of termination of employment, which I understand was the notice used, the notice says: "I hereby give you seven days' notice," so that I do not think we can make very much of that point.

Mr. ABE MOFFAT - It is seven days' notice. It is the formal notice given both by the Management and the workmen.

The EARL OF BALFOUR - Mr. Moffat said there had never been any misunderstanding when the National Coal Board had given notice to the men. In fact, he is not correct in saying it has always been on the seventh day, because I think he will agree we have sometimes given notice to the men on a printed form which says: "We hereby give you seven days' notice of termination of your contract of employment at this colliery. Your effective date of discharge is so and so." That would obviate any possible misunderstanding as to when the termination of the notice was.

Mr. ABE MOFFAT - Provided it complied with the Agreement.

The EARL OF BALFOUR - That probably explains why there never has been any misunderstanding.

Mr. ABE MOFFAT - Because we accepted it.

Mr. ALEX. Moffat - Is it not a fact that since this case some of your collieries have changed that and say: "Your effective date is such and such a date at 6 a.m. or 8 a.m."

The EARL OF BALFOUR - Very likely the times have been put in. I should think it would read the end of the day-shift, back-shift, or night-shift on such and such a date.

Mr. ALEX. MOFFAT - The Coal Board have in fact changed the terms of their notice to say that the effective date of discharge is such and such a date at such and such a time.
The EARL OF BALFOUR - I am reading from the original one. There is no provision for the time, but there is a space in which the time could be put in for clarity. If something had been done for clarity arising out of this case in the Lothians, we do not know anything about it.

The CHAIRMAN - Thank you, gentlemen. I will give my Award after I have seen the notes.

The judgment of the particular pit or dispute raises a question of interpretation of the word "day" in a notice of termination of contract issued by 10 Packers at the Hooke-Boo Seance of this colliery. The workmen handed in their notices on Friday morning, 31st March, 1950, and parties are at issue as to when the notice came into operation. The notice was in printed form and gave "seven days Notice." This is in conformity with the general agreement between the Board and the Union, dated 19th March, 1948, which by clause 2 provides that a workman shall not terminate his employment except by notice in writing to the management of not less than seven days of termination of his employment. The agreement does not contain any interpretation of "day" and, in particular, there is no reference to "shifts" in that agreement or in the notice of termination of employment handed in by the workmen. The question is therefore one of general principle and of ordinary construction of language in a contract. The full argument with which I was favoured did not suggest that in the mining industry "day" had any particular connotation or that it was in any way linked with any particular rotation of shifts. Indeed the particular question here appears to have arisen sharply only out of a change of shifts to be worked by the men concerned during the currency of their period of notice. I have formed a clear opinion on the general issue here. The ordinary rule of construction applicable to a contract of employment is that when no many days notice of termination is given, that notice does not expire until the end of the named day - in this case the seventh day - and, in the absence of any special provision in the Agreement or the Notice, I see no reason why that general rule should not apply here. I therefore determine that the notice of termination expired on midnight on the seventh day, i.e., midnight 7th April, 1950.

(signed) JOHN CAMERON.

17th August, 1950.
AWARD

Claim on behalf of 10 Packers at Easthouses Colliery.

This claim which has been referred to me as raising questions of principle not limited to the particular pit or dispute raises a question of interpretation of the word "day" in a notice of termination of contract issued by 10 Packers at the Meco-Moore Section of this colliery. The workmen handed in their notices on Friday morning, 31st March, 1950, and parties are at issue as to when the notice came into operation. The notice was in printed form and gave "seven days notice." This is in conformity with the general agreement between the Board and the Union, dated 19th March, 1948, which by clause 2 provides that a workman shall not terminate his employment except by notice in writing to the management of not less than seven days of termination of his employment. The agreement does not contain any interpretation of "day" and, in particular, there is no reference to "shifts" in that agreement or in the notice of termination of employment handed in by the workmen. The question is therefore one of general principle and of ordinary construction of language in a contract. The full argument with which I was favoured did not suggest that in the mining industry "day" had any particular connotation or that it was in any way linked with any particular rotation of shifts. Indeed the particular question here appears to have arisen sharply only out of a change of shifts to be worked by the men concerned during the currency of their period of notice. I have formed a clear opinion on the general issue here. The ordinary rule of construction applicable to a contract of employment is that when so many days notice of termination is given, that notice does not expire until the end of the named day - in this case the seventh day - and, in the absence of any special provision in the Agreement or the Notice, I see no reason why that general rule should not apply here. I therefore determine that the notice of termination expired on midnight on the seventh day, i.e., midnight 7th April, 1950.

(signed) JOHNN CAMERON.

17th August, 1950.
APPENDIX NO. I(d)

The Operation of the Pit Conciliation Scheme.1.

<table>
<thead>
<tr>
<th>DIVISIONS</th>
<th>NO. of QUESTIONS REFERRED TO PIT MEETINGS</th>
<th>NO. of CASES SETTLED BY PIT MEETINGS</th>
<th>NO. of CASES REFERRED TO DISTRICT DISPUTES COMMITTEE or UMPIRE</th>
</tr>
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<tbody>
<tr>
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<td>3,098</td>
<td>3,378</td>
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<tr>
<td>Northern*</td>
<td>3,981</td>
<td>971</td>
<td>3,276</td>
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<tr>
<td>Durham</td>
<td>-</td>
<td>2,852</td>
<td>-</td>
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<tr>
<td>North Eastern</td>
<td>1,637</td>
<td>1,254</td>
<td>1,426</td>
</tr>
<tr>
<td>North Western</td>
<td>1,432</td>
<td>609</td>
<td>1,392</td>
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<tr>
<td>East Midlands</td>
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<td>West Midlands</td>
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<tr>
<td></td>
<td>14,894</td>
<td>12,042</td>
<td>13,382</td>
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</table>

* The National Coal Board decided at the end of 1949 that the Northern Division (Northumberland, Cumberland and Durham) should be split and two new Divisional Boards appointed; one for the Durham Coalfields and the other for the Northumberland and Cumberland Coalfields.

1. National Coal Board: Annual Reports and Accounts.
**APPENDIX NO. 1(e)**

Estimated Quantity of Saleable Coal lost through Disputes (weekly average).  
1945 - 1950

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SCOTTISH DIVISION (Thousand Tons)</th>
<th>GREAT BRITAIN (Including Scotland)</th>
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<td>9.9</td>
<td>18.4</td>
</tr>
<tr>
<td>1946</td>
<td>4.2</td>
<td>14.8</td>
</tr>
<tr>
<td>1947</td>
<td>7.2</td>
<td>31.6*</td>
</tr>
<tr>
<td>1948</td>
<td>3.8</td>
<td>17.3</td>
</tr>
<tr>
<td>1949</td>
<td>5.3</td>
<td>24.3</td>
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<tr>
<td>1950</td>
<td>9.6</td>
<td>16.4</td>
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<tr>
<td>1951</td>
<td>4.9</td>
<td>15.4</td>
</tr>
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</table>

* The most serious strike this year was at Grimethorpe Colliery arising out of the implementation of the Five-Day Week.

As will be apparent from her high percentage contribution to the National Weekly Average, Scotland had a worse record than most other districts throughout this period. Most of the disputes were over wages, but some were concerned with such matters as the closing of pits.

---

1. National Coal Board - "Coal Figures"
2. See Appendix 1(e)
APPENDIX NO. I(f)

Loss of Coal through Disputes 1947-1951: Analysis by Causes

(1,000 tons)

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<th>1948</th>
<th>1949</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
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<td>Wages and Price Lists</td>
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<td>585</td>
<td>813</td>
<td>702</td>
<td>575</td>
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<td>Methods of working and colliery organisation</td>
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<td>182</td>
<td>128</td>
<td>104</td>
<td>230</td>
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<tr>
<td>Allowances and bonuses</td>
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<td>59</td>
<td>52</td>
<td>51</td>
<td>74</td>
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<td>Working Conditions</td>
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<td>44</td>
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<td>55</td>
<td>50</td>
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<td>Alternative Work</td>
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<td>23</td>
<td>18</td>
<td>36</td>
<td>36</td>
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<tr>
<td>Sympathy with men dismissed or suspended</td>
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<td>24</td>
<td>17</td>
<td>15</td>
<td>34</td>
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<td>Personnel and grading questions</td>
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<td>11</td>
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<td>8</td>
<td>8</td>
<td>7</td>
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<td>Objections to or disputes with officials</td>
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<td>12</td>
<td>5</td>
<td>14</td>
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<td>Refusal to await repairs</td>
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<td>11</td>
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<td>Conditions of Five-Day Week Agreement</td>
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<td>1654</td>
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1. National Coal Board: Coal Figures.
APPENDIX NO. I(g)

NUMEROUS OF DISPUTES, WORKPEOPLE affected by, and the AGGREGATE NUMBER of WORKING-DAYS LOST through DISPUTES in the COAL MINING INDUSTRY

from 1900 - 1951

(Based upon the Abstract of Labour Statistics, the "Ministry of Labour Gazette," and information supplied to the Royal Commission on the Coal Industry (1925).)

<table>
<thead>
<tr>
<th>Year/</th>
<th>Number of Disputes</th>
<th>Number of Workpeople Affected</th>
<th>Aggregate Number of Working-Days Lost</th>
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<td>120</td>
<td>20,000</td>
<td>4,480,000</td>
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<tr>
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<td>185</td>
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<td>6,750,000</td>
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<tr>
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<td>159</td>
<td>36,000</td>
<td>8,920,000</td>
</tr>
<tr>
<td>1903</td>
<td>113</td>
<td>44,000</td>
<td>11,090,000</td>
</tr>
<tr>
<td>1904</td>
<td>100</td>
<td>52,000</td>
<td>13,260,000</td>
</tr>
<tr>
<td>1905</td>
<td>82</td>
<td>60,000</td>
<td>15,430,000</td>
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<tr>
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<td>81</td>
<td>68,000</td>
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<tr>
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<td>83</td>
<td>76,000</td>
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<td>202</td>
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</table>

NOTES: Disputes involving not more than 10 workpeople and lasting for not more than one day are omitted, except where the duration continued to more than one day.
<table>
<thead>
<tr>
<th>Year</th>
<th>Number of disputes commencing in each Year</th>
<th>Number of workpeople directly and indirectly affected</th>
<th>Aggregate duration in working days of all disputes in progress in each Year</th>
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<td>1945</td>
<td>1,306</td>
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<td>1948</td>
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<td>1951</td>
<td>1,058</td>
<td>134,700</td>
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**Note:** Disputes involving not more than 10 workpeople and lasting for not more than one day are omitted, except where the duration exceeded 100 working days.
Compensation Scheme for Redundancy in the Coal Industry

In December 1948 the National Coal Board started a scheme to compensate mine-workers who lost their jobs through the large-scale reorganisation of the industry. The National Coal Board do not regard a mineworker as redundant until they have done their best to find him another job, but it is not always possible to find him one. During the war the Minister of Fuel and Power had introduced a scheme which guaranteed work or the minimum wage for twelve weeks to workmen made redundant by "approved schemes" of concentration. During the twelve weeks no Unemployment Benefit was drawn. When the Coal Industry Nationalisation Bill was before Parliament the Minister said the Government would like to see the scheme continued. There was no doubt that the miners were also anxious to continue the scheme, and the National Coal Board, for its part, stood in urgent need of the fullest possible co-operation from their employees in carrying out their plans for the reconstruction of the industry. The Board therefore negotiated an agreement with the National Union of Mineworkers and a new compensation scheme was put into force, after approval by the Minister. Payments under the "Twelve Weeks Rule" were stopped. Instead, compensation was to be paid at the rate of £2:3:8 a week for underground workers and £1:13:8 a week for surface workers. These payments could be made for a maximum of 26 weeks unemployment, and the worker was able to draw Unemployment Benefit as well. If he remained unemployed for the 26 weeks he would not receive less in total (compensation plus benefit) than he would have received over the same period under the Twelve Weeks Rule.

Definition of Redundancy

The Scheme applies specifically to redundancy "of an exceptional nature" arising from the need, recognised by the National Coal Board and the Union, "that far-reaching plans for the reorganisation and reconstruction of the industry should be rapidly pressed forward in order to maintain and improve the efficiency of the industry and its ability to ensure a satisfactory standard of living for those employed in it." It therefore provides that compensation shall only be paid to workmen who became redundant as a result of reorganisation projects scheduled by a Divisional Board. If a particular project has not been scheduled by the Divisional Board, and the Union thinks that it should be scheduled, the matter is to be referred to the District Conciliation Board for settlement.
Qualifications for receipt of benefit

The benefits are intended for workers who have rendered good service in the industry. The scheme provides that compensation shall be paid only to men who have been employed in the industry for periods amounting in total to not less than three years. For this purpose service in the Forces counts as service in the industry, if the man joined the Forces directly from the industry.

Guarantee of Trade Union Co-operation

In the Agreement the Union undertook to "co-operate and collaborate with the Board to bring about the prompt and effective implementation of all projects of reorganisation and reconstruction undertaken by the Board."
APPENDIX NO. I(i)

The Coal Mining Industry
Colliery Consultative Committees.

ELECTIONS

1. For the election of members specified in Section 5(a)(v) of the Constitution, the N.U.M. Branch (or Lodge) shall arrange for notices to be posted at a prominent place at the colliery, inviting all workmen (other than deputies and managerial grades) who are members of the N.U.M. and who have been employed at the colliery for not less than twelve consecutive months, to propose (either personally at the Branch (or Lodge) meeting or previously in writing) names for the appropriate grades for the vacancies on the Committee. The N.U.M. Branch shall nominate from these names at least two candidates for election to each vacancy, and shall submit their names to the Secretary of the Committee not later than twenty-one days and not earlier than twenty-eight days before the date of the election.

2. For the election of the deputy representative specified in Section 5(a)(iv) of the Constitution, the Deputies' Branch (or Lodge) shall arrange for notices to be posted at the colliery, inviting all deputies who are members of the Branch (or Lodge) and who have been employed at the colliery for not less than twelve consecutive months, to propose (either personally at the Branch (or Lodge) meeting or previously in writing) names for the vacancy on the Committee, from which the Branch (or Lodge) shall nominate at least two candidates for election and shall submit their names to the Secretary of the Committee not later than twenty-one days and not earlier than twenty-eight days before the date of the election.

3. If, despite the procedure specified in paragraphs 1 and 2 above, only one person is proposed for a vacancy, then that person shall be deemed to be elected.

4. All candidates for election must satisfy the following conditions:
   (i) They shall have been employed at the colliery for not less than 12 consecutive months before the date of the election.
   (ii) They shall be members of a Trade Union generally recognised as being appropriate for their grade.
   (iii) They shall be engaged in the grade of work for which they are nominated.

5. The Committee Secretary shall post a list of candidates as soon as practicable after nominations have been received, and in any case not later than/
than 14 days before the election.

6. The ballot for the election of the deputy member of the Committee and for the worker members respectively, shall be held simultaneously on a date which shall be determined by the Committee, but in each year the date so determined shall not be later than 20th December. At least fourteen days previous notice shall be published of the date on which each election is to be held.

7. The Committee shall be responsible for the proper conduct of the election in accordance with the Constitution and the terms of this Schedule.

8. All persons employed at the colliery, other than deputies and managerial grades shall be entitled to vote in any ballot for the election of worker members to the Committee. Voting in respect of deputies nominated to serve on the Committee shall be restricted to the deputies employed at the Colliery.

9. Locked ballot boxes, pencils, tables, etc., shall be provided by the colliery manager and conveniently arranged to enable voters to mark their voting papers.

10. Colliery staff, as determined by the Committee after consultation with the senior colliery clerk, shall issue and count voting papers.

11. Immediately polling has ceased, the Committee Secretary, or a person authorised by him, shall seal the ballot boxes and arrange for their safe keeping until they are unsealed and opened at the time and place of the official count.

12. Candidates, the Colliery Manager and/or any Colliery official designated by him, and the N.U.M. Branch Secretary and/or any official designated by the Branch may be present at the official counts; in the case of the count relating to the election of the deputy representative, officials designated by the Deputies' Branch shall be substituted for officials of the N.U.M. Branch.

13. Costs incurred by an election held in accordance with the Committee Constitution and the terms of this Schedule, shall be paid out of Colliery funds.

14. The date prescribed in paragraph 5 of this Schedule shall be appropriately altered for the first election held under this procedure (see Section 7 (a) of the Model Constitution).*

* Section 7(a) states: Elections shall be contested in accordance with the procedure specified in Schedule 1 hereof, and an election shall be held as early as possible in 1949 on a date to be decided by the appropriate Divisional Consultative Council: the next election shall be held in December 1950, and subsequent elections shall be held annually in the month of December.
MODEL VOTING PAPER
Colliery Consultative Committee
Election of Committee Members for the Year 19...

You are entitled to six votes, but not more than one vote for each separate Group of Candidates, except in the case of Group I, where you are entitled to vote in favour of two candidates of your choice.

<table>
<thead>
<tr>
<th>I. Two Face Workers Required</th>
<th>II. One Contract Worker Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote TWICE ONLY in this Group. Place X opposite your choice.</td>
<td>Vote once ONLY in this Group. Place X opposite your choice.</td>
</tr>
<tr>
<td>ADAMS, R.W.</td>
<td>BRADLEY, R.H.</td>
</tr>
<tr>
<td>ARTHURS, M.</td>
<td>GREENER, P.</td>
</tr>
<tr>
<td>MASTERS, J.A.</td>
<td>WARD, W.R.</td>
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<tr>
<td>ROBERTS, T.</td>
<td>YOUNG, R.S.</td>
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</table>

<table>
<thead>
<tr>
<th>III. One Haulage Worker Required</th>
<th>IV. One Surface Worker Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote once ONLY in this Group. Place X opposite your choice.</td>
<td>Vote once ONLY in this Group. Place X opposite your choice.</td>
</tr>
<tr>
<td>GRANT, J.W.</td>
<td>MARTIN, B.</td>
</tr>
<tr>
<td>JONES, T.H.</td>
<td>NEEDHAM, E.W.</td>
</tr>
<tr>
<td>LOWTHER, S.J.</td>
<td>REDFEARN, R.H.</td>
</tr>
</tbody>
</table>

V. One Tradesman Required
Vote once ONLY in this Group. Place X opposite your choice.
EDWARDS, J.A.
DUNN, F.
THOMAS, J.W.
WATSON, D.H.

NOTE - The above voting paper is merely intended to serve as a guide to the kind of voting paper which will be required for the ballot of worker and deputy candidates respectively.
APPENDIX NO. II(a)

MINUTES OF SAFETY FIRST COMMITTEE MEETING

held in Assistant Superintendents' Office at 3.15 p.m. on Thursday, 29th May, 1952.

Present: Messrs. Scott, Wood, Mackay, Ducat, Black, Pearson, Sutherland, Anderson, and the Secretary (Alexander).


Off 1.5.52. Restarted 19.5.52 = 2 weeks 2½ days or 108 hours.

Injured arch of left foot, when stepping off ladder in Joiner's shop, on 16th April.

Simons explained that to get from ladder to floor he had to step onto a bench and jump from there to floor, as the foot of the ladder was close up against the bench, preventing the bottom rungs from being used. He did not feel any bad effects at time. He reported to First Aid Officer on 22nd April, received treatment and was advised to attend hospital. He said he had already reported the awkwardness of getting up to oil overhead shafting in Joiner's Shop, as he had been doing before the accident.

Mr. Scott drew attention to long delay in getting First Aid treatment. Messrs. Black and Wood to make inspection. Accident considered avoidable.

2. A. Mason. Charge Hand Rigger.

Off 15.5.52. Restarted 27.5.52 = 1 week 3½ days or 72 hours.

Cellulitis of right leg, resulting from being struck by batten while erecting tubular scaffolding at Switch House, No. 1 Coal Shed on 12th May.

Mason said that he had been pulling back battens of scaffolding stage. He had felt no ill effect at the time and had not bothered to get first aid attention. The affected part had swollen later and he had reported to first aid officer, the following day. It was considered that accident was due to carelessness.

Attention was drawn to the fact that the two witnesses names on the original accident report by Mason had since stated that they had not witnessed the accident.

3. / 1. The only formal consultation which takes place in this undertaking is on the subject of safety.
Off 16.1.52. Restarted 3.3.52 - 6 weeks 3½ days or 292 hours.
Burned on both hands by short circuit while cleaning Rectifier Switchboard, on 15th January.
Mr. Scott stated that the Electricity Factory Inspector had seen Murphy in connection with the accident, but no report had yet come forward.
Murphy said that the flash-over had occurred while he was leaning over negative bus-bar to clean positive bus-bar. The brush he was using was metal-clad. The switchboard could not be rendered "dead" as no other circuit was available to supply old Pumping Station. When asked about the advisability of using non-metallic brushes, Murphy said they were not available. He realised the danger involved and thought that bad lighting may have contributed towards the accident. He agreed that rubber gloves were available and would have lessened risk.
Mr. Scott pointed out that the same job had been done before without trouble. It appeared that the wrong type of brush had been used. Rubber gloves should have been worn. The accident was avoidable.

Off 1.8.51. Restarted 24.3.52 = 33 weeks 3½ days or 1,480 hours.
Dermatitis resulting from charging and discharging Purifier Boxes (1.8.51).
Dalgleish thought that contact with Soda Ash had caused the trouble. He had used Rozalex daily for washing after work. He had attended doctor for treatment but had received no advice from him except a suggestion to change job. He wore his own gloves on the job, but they were badly worn. The old type of soap was in use at the time his dermatitis had started.
The first aid officer stated that he had given Dettol bath to Purifier men before new soap was introduced.

5. George Walker. Labourer.
Off 8.5.52. Restarted 23.5.52 = 2 weeks 1 day or 96 hours.
Big toe of right foot broken, while loading C.I. gutters on to lorry, 7th May.
Walker said he had bent down to put sling round piece of gutter. The gutter suddenly rolled over on to his foot. Accident considered avoidable.

Off 2.5.52. Restarted 12.5.52 = 1 week 1 day or 56 hours.
Strained right foot while unloading lorry, 1st May.
Young had jumped down from lorry on to batten alongside; it had slipped and caused the strain. He was warned to be careful in future.
Interviews: 7(a) Patrick Glen, Labourer.
Off 22.12.51. Restarted 7.1.52 = 2 weeks \( \frac{1}{2} \) day or 92 hours.
Fractured ribs while carrying scrap metal from wagon to scrap heap.
Glen said he was removing pieces from a heap of scrap metal on which he was standing, in a wagon. The metal was covered with frost and he had jerked at a piece to get it clear. The footing was bad and he had slipped falling backwards on to a piece of metal. It was suggested that a better footing may have been got by putting down some old sacks, and that it might be advisable not to do this type of job in frosty weather. Attention was drawn to discrepancy in report as to place of accident. (Unavoidable).

7(b) Patrick Glen, Labourer.
Off 24.4.52. Restarted 12.5.52 = 2 weeks 2½ days or 108 hours.
Injured foot while unloading steel plate from lorry at No. 2 Plant House, 23rd April.
Glen and a mate were using crow bars to lever up a steel plate to provide a grip for others who were to carry the plate away. His mate's crow bar had been suddenly removed (it may have slipped) and the plate had fallen on to his foot.
It was pointed out that the method used was careless - the plate should have been raised only a few inches allowing wooden wedges to take the weight. The accident was avoidable and Mr. Black was asked to discuss the matter with the charge hand concerned. Accident considered avoidable.

8. Joseph McIntosh, Bricklayer.
Off 5.3.52. Restarted 18.5.52 = 1 week 4½ days or 80 hours.
Lacerated scalp, while building up pillars in No. 1 Producers, 4th March.
McIntosh said that, hearing a slight explosion and seeing flames, he hurried towards doorway, and his head came into contact with a fire bar which had been left in place. "Pots" were being filled at the time. He had heard similar explosions at various times. It was learnt that the fire plate had been left in because of its special size.
It was agreed that, in future, when a similar job was being done and neighbouring producers were to be charged, the Bricklayer Foreman should be warned in advance. Accident avoidable.

S.F.I. Report. The Safety First Inspector read his report and a short discussion followed. Mr. Anderson complained about lack of lighting at various points, also old plates and muck left lying around. Mr. Scott said lighting delay was due to inability of private contractor to obtain jointing boxes. Mr. Pearson spoke of danger of bread slicing machine at Canteen.
APPENDIX NO. II(b)
Professional, Technical and Trade Qualifications in the Gas Industry
Approved Courses

(1) Degree of a British University.

(2) The Associate Membership Examination of the following Professional Institutions:

- Institution of Chemical Engineers
- Civil Engineers
- Electrical Engineers
- Gas Engineers
- Heating and Ventilating Engineers
- Mechanical Engineers
- Structural Engineers

Royal Institute of Chemistry
Institute of Fuel
- Chartered Accountants in Scotland
- Municipal Treasurers and Accountants
- Cost and Works Accountants

Society of Incorporated Accountants and Auditors
Association of Certified and Corporate Accountants
Chartered Institute of Secretaries

(3) The Diploma in Gas Engineering (Manufacture) and (Supply).


(5) The Examination in Technology of Gas Manufacture and supply, City and Guild of London Institute.


(8) Certificates of City and Guilds of London Institute in appropriate Electrical Engineering, Mechanical Engineering and Building Subjects.

(9) Courses in Management and Foremanship.

(10) Royal Society of Arts Examinations in Shorthand, Typewriting, Bookkeeping, etc.

1. For the views of employees upon Scottish Gas Board policy with regard to Education and Training, see page 397.
APPENDIX III(a)

S.E.S.E.B. : EDINBURGH AREA : LOCAL ADVISORY COMMITTEE

JOINT CONSULTATION at the EDINBURGH (DEWAR PLACE) ELECTRICITY UNDERTAKING. Minute of Seventeenth Meeting of Local Advisory Committee held in Dewar Place on Thursday, 15th March, 1951, at 3 p.m.

PRESENT

For the Employees Councillor Fenton, Messrs. Anderson, Potter, Brown, Carr, Shepherd, Ward, Hodgson, Cooper and Scott.

For the Board Messrs. Galloway, Kynoch, Walker and Bell.

In Attendance Mr. Storer, Secretary.

Apologies for Absence Apologies intimated on behalf of Mr. Allcock and Mr. Robertson.

Chairman Councillor Fenton.

The Minute of Meeting of 15th February 1951 was submitted and approved.

BUSINESS ARISING

Recreational Return Matches

The Secretary reported that the number of employees who wished to be considered for selection in the teams were nineteen for Bowls, four for Golf and none for Tennis.

These names had been scrutinised by the Secretaries of the relevant Sports Clubs and arranged in order of merit of skill as adjudged by them, also their degree of skill was stated and duly forwarded to Headquarters for consideration.

Mr. Anderson asked if a shift worker was selected to play in this return match and so lose a shift, would he be paid for this lost shift? In such cases pre-vesting date, the wages were made up.

Mr. Galloway said as the match was an Inter-Board affair, a relief shift would be arranged and the shift worker playing in the match would suffer no loss of pay.

Premises for Sports and Social Club

Mr. Scott said that a Sub-Committee of the Council of the Sports and Social Club had visited three houses.

One was not considered suitable but two were suitable and at the latter the Board's Architect was in attendance and his reports on these properties were duly forwarded to the Board's Secretary.

One choice was the Regent Terrace house but Mr. Mullan said a very obvious objection is to be found in the fact that there are some 13 rooms located on no less than five floors. Further, the large private garden would not be available to the members of the club as the rules governing these private gardens preclude use/
use other than by the actual resident owner or occupier of the property and his or her family. He also said if we could find equally commodious premises on say two floors, our purpose would be much more adequately served.

The other choice was the Coates Gardens house of some 11 rooms on four floors, which is being submitted to the next meeting of the Board on 2nd April.

From the Architect's reports, it was felt that both properties were suitable for Club premises and accordingly it was RESOLVED:

"That this Committee respectfully solicit the Board at their meeting on 2nd April to consider both properties as very suitable premises for Club Rooms."

Funeral Leave
The case of Mr. Calder's half day leave being deducted - this was a mistake and has now been rectified.

Sick Pay Scheme - X-Ray Examination
Mr. Walker said he had seen Mr. Kirk and reported that on two occasions, Mr. Kirk had to attend for X-Ray examination, one when working at Gilmerton and the other when working in the High Street in close proximity to the Centre.

Mr. Kirk had made no complaint and attended these examinations with the absolute minimum loss of working time.

Mr. Shepherd was most emphatic that Mr. Kirk had asked him to make the complaint on his behalf.

Mr. Walker said it was apparent that there must have been some misunderstanding.

Mr. Ward said that members before lodging an employee's complaint should ascertain that the complainer has first gone to his foreman or engineer and received no satisfaction.

NEW BUSINESS

Review of Accidents in February 1951.
The Committee reviewed the six accidents which had occurred in February.
Regional Safety Officer's Review of Accidents - Half Year to 30th September, 1950.
The above Report was submitted and perused.

Arts and Crafts Exhibition - National Awards.
The Chairman said it was gratifying to notice from the list of the above awards that three had come to the South East Scotland Area and that one of these had come to Edinburgh.

It was brought to the notice of the Management that several of the exhibits assumed to be returned were missing.

Mr. Bell said that all the exhibits had been collected and delivered by the B.E.A.'s own road transport so there was every chance of the missing articles being found but Mr. Shepherd of Headquarters was making enquiries.
Locker for Meter Fixers' Receipt Books

Mr. Brown suggested the provision of a locker or locked drawer for keeping
the Meter Fixers' Receipt Books, which were only used occasionally, and if
always carried became torn and dirty.

Mr. Bell said the Management would look into this matter.

Substation Attendants' Training Scheme

Mr. Anderson complained that a new trainee had been started (Mr. Gibb at
Causewayside) who had no electrical background whatever, according to information
received. We had a cleaner at McDonald Road who was very keen on advancement
and had picked up the routine duties of a Substation Attendant and, in fact, was
capable of taking a shift - should this man not get consideration?

Mr. Kynoch said Mr. Anderson had got wrong information and after a short
discussion, it was agreed that the Management make enquiries and report to the
next meeting.

The above Report was submitted and perused.

Mains Office - Poor Lighting

Mr. Hodgson said the lighting of this office was very unsatisfactory and
could be much improved by replacing the present fittings with those of modern
design.

Mr. Galloway said we had no money to spend on further lighting improvements.
meantime but we would have the walls and fittings cleaned and higher powered
lamps put in, which should improve the lighting.

Date of next Meeting

The Chairman intimated that the date of the next Meeting would be Thursday,
19th April, 1951, and he wished to thank the Members of the Committee for their
helpful co-operation in handling all matters arising at their meetings of the
session now closing.
APPENDIX IV

List of Abbreviations

A.B.T. Association of Building Technicians
A.E.U. Amalgamated Engineering Union
A.G.M. Area General Manager (Coal Industry)
A.M.E.E. Associated Municipal Electrical Engineers
A.S.E.D. Association of Shipbuilding and Engineering Draughtsmen
A.P.T. Administrative, Professional and Technical Grade (Gas Industry)
A.S.S.E.T. Association of Supervisory Staffs, Executives and Technicians
A.U.B.T.W. Amalgamated Union of Building Trades Workers of Great Britain & Ireland
B.A.C.M. British Association of Colliery Management
B.E.A. British Electricity Authority
B.G.S.A. British Gas Staffs Association
C.A.W.U. Clerical and Administrative Workers' Union
C.C.C. Colliery Consultative Committee
C.W. (PHE & C)C.C. Colliery Welfare (Pithead Baths & Canteens) Consultative Committee
C.E.B. Central Electricity Board
C.I.S.W.O. Coal Industry Social Welfare Organisation
C.S.E.U. Confederation of Shipbuilding and Engineering Unions
D.J.A.C. District Joint Advisory Council
D.J.B. District Joint Board
D.J.C. District Joint Committee
D.J.I.C. District Joint Industrial Council
E.P.E.A. Electrical Power Engineers' Association
E.T.U. Electrical Trades Union
F.G.E. Federation of Gas Employers
G.O.G. Gas Officers' Guild
I.A.E.P.C. Incorporated Association of Electrical Power Companies
I.E.E. Institution of Electrical Engineers
I.G.E. Institution of Gas Engineers
I.M.E.A. Incorporated Municipal Electrical Association
I.S.T.C. Iron & Steel Trades Confederation
J.N.N.C. Joint National Negotiating Committee (Coal Industry)
L.A.C. Local Advisory Committee (Electricity Supply Industry)
M.F.G.B. Miners' Federation of Great Britain
M.W.F. Miners' Welfare Fund
N.A.C.M. National Association of Colliery Managers
N.A.C.O.D.S. National Association of Colliery Overmen, Deputies and Shotfizers
N.A.L.G.O. National Association of Local Government Officers
N.A.C.S.A. National Association of Clerical & Supervisory Staffs
N.C.B. National Coal Board
N.F.B.E.T.E. National Federation of Building Trades Employers
N.F.B.T.O. National Federation of Building Trades Operatives
N.F.G.E. 1. This Association is concerned only with professional and technical advancement; negotiating matters for colliery managers lie within the scope of the B.A.C.M.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>N.F.G.E.</td>
<td>National Federation of Gas Employers</td>
</tr>
<tr>
<td>N.G.C.</td>
<td>National Gas Council</td>
</tr>
<tr>
<td>N.J.A.C.</td>
<td>National Joint Advisory Council</td>
</tr>
<tr>
<td>N.J.B.</td>
<td>National Joint Board</td>
</tr>
<tr>
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<td>National Joint Committee</td>
</tr>
<tr>
<td>N.J.I.C.</td>
<td>National Joint Industrial Committee</td>
</tr>
<tr>
<td>N.M.W.J.C.</td>
<td>National Miners' Welfare Joint Council</td>
</tr>
<tr>
<td>N.R.T.</td>
<td>National Reference Tribunal</td>
</tr>
<tr>
<td>N.U.E.F.M.E.W.</td>
<td>National Union of Engineers, Firemen, Mechanics &amp; Electrical Workers</td>
</tr>
<tr>
<td>N.U.C.W.</td>
<td>National Union of Corporation Workers</td>
</tr>
<tr>
<td>N.U.G.M.W.</td>
<td>National Union of General and Municipal Workers</td>
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<td>N.U.M.</td>
<td>National Union of Mineworkers</td>
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<td>N.U.P.E.</td>
<td>National Union of Public Employees</td>
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<td>P.T.U.</td>
<td>Plumbing Trades Union</td>
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<td>S.A.G.M.</td>
<td>Scottish Association of Gas Managers</td>
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<td>S.C.E.B.T.A.</td>
<td>Scottish Colliery Enginemen, Boilermen and Tradesmen's Association</td>
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<td>Scottish Gas Board</td>
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<td>S.R.J.I.C.</td>
<td>Scottish Regional Joint Industrial Council</td>
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<tr>
<td>T.G.W.U.</td>
<td>Transport and General Workers Union</td>
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<tr>
<td>U.O.M.A.</td>
<td>United Operative Masons' Association</td>
</tr>
</tbody>
</table>
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