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THE ADMINISTRATION OF PORTS.
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Introduction.

The Ports of the World form a most important branch of the economic structure of those Countries which are situated upon the sea-board. They have a definite function to perform in the commercial life of a Country and have peculiar problems of their own. These are somewhat akin to the problems which are found in Municipalities or in the other transport public utilities though, unlike them, there is no uniformity in their ownership or administration.

Most ports are of considerable antiquity. The diverse histories and customs of the Countries in which they are situated have been largely responsible for the different forms of administration which are found, while local historical factors account for the differences between the administration of individual ports within the same Country. Nevertheless, all ports have the same economic functions to fulfil and the purpose of this Paper is to propose a form of administration for the ports of a Country, which would create uniformity in Port Administration throughout the World and provide a remedy for the many differing disadvantages which are exhibited in all existing forms of Port Administration.

General Functions of a Port.

The primary function of a port is to provide a point of contact between land and sea transport. A port is thus essentially a gateway at which the trade routes which/
which are spread over both land and sea converge. In this gateway a transference is necessary, and goods have to be assembled on the quays for the purpose of being loaded into ships, or stored there after they have been discharged. This dual operation of handling and storage involves the two most important characteristics of a port; the provision of accommodation for both goods and vessels, and the provision of shelter from the elements. The terms "Port" and "Harbour" are commonly used as if they were interchangeable but this is not strictly the case. A harbour is primarily a place of shelter for vessels from storm: the addition of facilities for handling goods is necessary to provide a port. General commercial usage has made the two terms "Port" and "Harbour" synonymous with the meaning of port, and they must therefore be so used hereafter.

The different forms of construction of ports depend upon the variety in the natural features which have to be overcome. Variations in situation relative to prevailing winds, exposure to storms, and tidal range all play their part and have a significant effect upon capital cost and subsequent finance of a port, but do not affect the manner in which a port is administered. All ports have their inception and tend to develop solely in accordance with the dictates of trade requirements along the line of recognised traffic routes, and no amount of convenience or suitability will originate or foster a port where the inducement of trade is lacking. For a port to prosper it must have a large district behind it which is well developed commercially, a wealthy "hinterland" through which the trade gathers and flows to the sea at the port. The area may be contributory or distributory/
distributory, or a combination of both.

In spite of the permanence and cost of their engineering works, ports live largely from hand to mouth. Although the facilities are costly to provide, they are not remunerative and appear to be liable to abandonment at short notice, either through the transference of the shipping lines to another port, or through economic factors causing the complete disappearance of the trade itself.

It is thus apparent that those in charge of the administration of a port have to take a very long view of the potentialities and their undertaking, and face problems different from those encountered by a Municipality or normal trading concern. The benefit of improved port facilities is felt more frequently by the users of the port than by those who have actually spent money on their provision. This uncertainty, and the large amount of capital involved, has been largely responsible for the growth of the individual forms of administration which are found in ports throughout the World. The economic needs of all are very similar, but great differences exist in the forms of ownership and methods of administration.

The general working of ports is delegated to minor officials whose duties and responsibilities are much the same for all ports the World over, so far as routine management and the actual berthing of vessels and the handling of cargo are concerned. The final responsibility for the higher administration, whereby the main policies of development, finance and management are laid down, rests usually in the hands of a small body of men advised by expert officials, or in the hands of chief/
chief officials advised by representatives of traders etc. The principal differences between the forms of administration lie in the powers and constitution of these groups of men, and the individual powers of their chief officials.

**Different Systems of Administration.**

The different systems of port administration all have a historical background and are based on the laws and customs of the Countries in which the ports are situated. They fall under five main headings - ownership by a separate Authority such as a Statutory Trust or Commission; by the Nation or Local State; by the Municipality; by a Railway Company; and by a Company trading for profit. Ownership by a separate Authority is typical of the form of administration which is found in Great Britain and the British Dominions, and has grown out of the economic conditions in Great Britain and its particular method of Parliamentary Government. National and State ownership are found in many Countries, headed by France, which have a national history of Governmental control of all economic functions which can in any way be considered public utilities. Municipal ownership is found in isolated cases of harbours of varying sizes in Europe and outside it, such ownership being usually the result of specialised local conditions. Ownership of ports by Railway Companies is mainly confined to Great Britain and her Colonies, although parts of certain ports in the United States are owned by Railway Companies. The ports of South Africa and some other British Colonies are owned by the Government but are administered as one unit dependent upon the Railways and as such can best be considered/
considered as Railway ports. Examples of ownership by a Company or Corporation working for gain are few, and now confined to minor ports or ports which are subsidiary to vast commercial organisations.

Powers of Officials.

Throughout the World the routine administration of ports is in the hands of whole-time officials who have been specially trained for the duties which they are called upon to perform, and in almost every case, one, or at the most, two head officials are in direct control. The differences between the forms of administration detailed in the Appendices are brought out in the differences between the scope and powers of these officials in the different Countries, and in the powers and constitution of the body or authority to whom they are responsible for their actions. In both administration by Special Authority and by Municipality, the ultimate responsibility for policy etc., devolves upon the body of Trustees or City Councillors. The chief official is their servant and adviser, and only has absolute responsibility in matters of detail. In Countries which have a National form of administration, the chief officials, through the Government behind them, have the final power of decision, and they receive the advice of Consultative Committees which represent the commercial interests of the port.

Irrespective of the form which the administration takes, the initiation of policy usually devolves upon the senior full-time official, who must review all questions in the light of his expert knowledge and who must be able to guide his superiors in their deliberations/
deliberations, though he himself may not have the final power of decision.

The different forms of administration have arisen and exist through endeavours to assist the head official to carry out his duties in an efficient and impartial way, and guard against the possibility of his incompetence, bias, or dishonesty. The efficiency of a port is affected, not only by the competence of the officials, but also by the competence and freedom from personal bias or political motive of all those persons who, by vote or otherwise, have the power of making or assisting in the making of the final decisions in harbour matters.

The tenth International Congress of Navigation held in Milan in 1905 decided - "any system of administration which promotes the prosperity of a port and the development of traffic is good, provided the administration itself is good." The inherent weaknesses of the different systems become most apparent when the administration is bad, and those who hold the power act in accordance with their own motives or the selfish dictates of the particular section of the community which they represent, and not in the public interest.

It will therefore be of value, before proposing the ideal form of administration, to examine the various systems as discovered in the chief maritime Countries, stressing their weaknesses as well as their strengths.

Administration by Statutory Trust.

The statutory Port Trust is the typical British form of ownership, though all forms of ownership, with the/
the exception of National ownership, are found in Great Britain. For a Port Trust to prosper, there must be in existence a trade centre of sufficient magnitude to ensure a sufficient income from the dues charged to carry out the financial obligations of the port. There must also be available, suitable representatives of commerce to become Trustees and to direct the port's affairs. The great advantage of control by a Port Trust is that the actual control is in the hands of those members who, through representing commerce, have personal knowledge of the facilities required and of any defects in management. As those who are in charge have to pay for the services rendered, in the form of rates and dues on vessels and goods, a strong check is kept upon extravagance.

Where men of ability and goodwill take a keen interest in their work as Trustees, no fault can be found with the system. Such men give their best services for the good of the port as a whole and, by their wide and varied experience, bring to the management of the port a breadth of vision and a knowledge of detail which could not be possessed by a single individual. What the Commissioners lack in engineering and specialised knowledge, they learn from their full-time officials, upon the value of whose proposals they are in a position to form a considered judgment. All questions are settled by vote, and prompt decisions can be reached. All decisions of the Boards are final and can only be reversed by a rescinding decision of the Board itself.

The chief disadvantage of control by a Port Trust is the extent to which its finances are dependent upon the traffic of the port and the difficulties which it/
it may experience during prolonged periods of trade depression. The major portion of the income of most Port Trusts varies directly with the trade, while the expenditure, apart from some payments for casual labour, is practically unaffected by the quantity of goods passing through the port. Interest and redemption charges have always to be paid on the capital debt, while the property must be maintained in proper condition, and the work of dredging, surveying, and buoying the approaches to the harbour has to be maintained regardless of the number of ships entering the port. Thus in times of bad trade a Port Trust is rarely able to assist trades by reducing its charges unless it has built up large reserve funds; rather, if it is to remain financially sound it must increase its charges when the trades are least in a position to pay.

Other disadvantages of the system are seen particularly when Boards are of large size, and upon which there are representatives who are only indirectly connected with shipping matters. It frequently occurs that real consideration of the affairs of the port is left to a small section of the Board who attend with great regularity and carry out their duties conscientiously. The other members of the Board leave the whole of the work to these few, attending meetings only when pressed to do so and voting upon matters to which they have given scant consideration. A further weakness of the system is the power of representatives of certain sections of the Board to vote, not for the welfare of the port as a whole, but in accordance with the needs of the interests which they represent. A similar source of weakness is the lack of interest which such members show in any port topics/
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topics which do not immediately concern their own sphere of activities.

When the decisions of the Trust entail works of a capital nature or the borrowing of additional sums of money over and above those already allocated, Parliamentary sanction is required before the works can be commenced. This procedure involves considerable delay, it being rarely possible to obtain such sanction in less than a year.

Port Trusts upon the British principle are found throughout the British Colonies and Dominions, especially the far East, but the criticisms, both favourable and unfavourable, which have been made above are found to apply, irrespective of situation.

National Administration.

The next most important system is the National one, of which France is the chief example. The financial position of all ports is guaranteed by the Government and they are therefore independent of trade fluctuations for their financial stability. The general policy with regard to all ports is laid down by the Minister of Transport who places the local administration in the hands of Government officers who have been carefully trained in port engineering and management. These senior officers receive the assistance of Advisory Committees which, in certain cases, have powers of decision within a limited competency, provided works involving financial assistance from the Government are not involved. The official has the final power of decision, through the officers of the Government behind him/
him, and he is thus in a position to insist upon impartial treatment of all matters within his competency. The ports of the Country are worked as parts of one unit and the Government is in a position to prevent the construction of redundant facilities and, where two ports wish to provide facilities for a new trade, to ensure that they will be provided at the port which can handle the trade most efficiently from the point of view of the Country as a whole.

The chief criticism levied against the National system is its lack of flexibility and the absence of close contact between the officials and the commercial interests. The latter are only able to advise and persuade without having the power of active decision in matters of major importance. Little difficulty is experienced in obtaining men of the right calibre to act upon the Advisory Committees as they are appointed by representatives of the Government and thus possess a higher status than if they had been merely nominated or elected by the bodies which they represent.

In France, harbour expenditure forms a part of the National Budget in the same way as the Fighting and other Services. Port policy is therefore subject to political influence and the exigencies of national finance, and a complaint frequently made is that after the requirements for the Defence and ordinary Services have been met by the Government, little money is left for port development. A change of Government may entail a change of policy, while there is always a measure of uncertainty as to the future position through the possible necessity for curtailment of expenditure on harbour affairs, even after works have been authorised.
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It is often found that the grip of the Central Government upon their local officials is unduly strong. These officials are forced to submit many matters to their superior officers in the Government service, which in Trust owned ports would be settled on the spot. The reviewing of such questions places upon the officials of the Central Government a larger amount of work than they are able to get through, and it is quite common for inordinate delays up to as much as three years to be experienced in obtaining sanction for proposals, even when all the local authorities are in agreement. The more extensive the works the greater the delay, especially if they are of such importance that they have to be reviewed by some very high State official who can only devote a limited portion of his time to harbour affairs or the affairs of the harbours concerned.

Another serious complaint against the system, made more in other Countries than in France, is the complete dependence of the port for its success upon the ability and probity of the officials concerned. It is hard for those outside the Government service to get changes made where they deem them necessary, and before any action can be taken the abuses of which complaint is made must be grave.

Similar systems of port administration are found in Italy, Russia, Latin America and some other Countries. Differences naturally exist between them, but for purposes of a general consideration, the foregoing comments hold good for all forms of National Administration.
Municipal Administration.

Municipal administration is the standard type which is found in operation in Continental European ports facing the sea-board of the North Sea and the Baltic, whilst it is also typical of many of the ports in the United States. The general method of administration is very similar to that of the statutory Trust or Commission. The differences arise through the difference in the financial powers and constitution of the controlling bodies. A Municipal port has the financial backing of the City behind it. Capital works are thus frequently provided out of the City funds, while working deficiencies can be made up out of the local rates. The City Councils are primarily elected, not upon the basis of business qualifications or competence, but upon the ordinary Party principles which govern Municipal politics. For the members to be trained in matters connected with shipping is therefore generally the exception to the rule, and they have to familiarise themselves with harbour affairs whilst actually carrying out their duties. The great weakness of the system, however, is due to the prominence of Party politics in Municipal affairs and to the instability which sudden changes of policy bring into a service in which an unusual measure of foresight is required and one which, more than others, is completely dependent upon outside influences for its prosperity.

The large European Municipal ports have been fortunate in that the Cities connected with them have appreciated their dependence upon sea-borne trade for their prosperity. Although they have administered the ports/
ports as Municipal trading concerns, the interests of the trade have usually been placed before those of Municipal electors. This, unfortunately, has not always applied in Cities in which the port is of relatively small importance. In such cases the port has all too frequently been neglected, or exploited as a means of revenue, or vote-catching. As a rule, where the number of persons delegated by the Municipality to supervise the administration of the port has been of medium size, the administration has been most efficient, but where it has been placed in the hands of two or three persons appointed by the Municipality, grave abuses have often arisen.

The great disadvantage of the system lies in the difficulty which is experienced by traders in getting their wishes considered in the event of their being at variance with the Harbour Authority or its officials. Such traders have no power to influence the administration of the harbour, as, apart from protest, they can only act through effecting changes in the Municipal representation. The officials themselves, lacking the strength of the Central Government behind them, are less able to maintain an independent attitude than in the State owned harbours, while those who supervise their activities are more frequently actuated by personal or political motives than in the case of statutory Authorities.

Railway Administration.

Although a Railway Company has been found to be an ideal means of performing the public service of the carriage of goods and persons by land, it is not so suitable/
suitable for the control of ports, in which sea transport and road transport, often in competition with the railway itself, should have impartial treatment. In all cases the railway portions of the undertaking are of great magnitude when compared with the ports which they administer, and it is almost the invariable rule that the ports are regarded as a side-line to the Railway Company's activities, and as feeders to the railway systems.

Great advantages and economies are experienced where one Railway Company owns a number of ports, and where a port specialises in mineral traffic or trades of a limited number of classes, Railway administration is very efficient, particularly from the point of view of ease of handling traffic. The Railway Companies, within their own systems, are able to avoid duplication of facilities or to close redundant harbours, as was recently done in the case of Penarth. They are able, in a measure, to allocate different trades between their ports and to work all as one unit, with consequent economies in floating plant and personnel. Where harbour specialists are employed, they are able to attract personnel of greater ability for the higher executive positions than could be obtained by an individual port, though subordinate officials upon the spot are usually of lower ability and less responsible than those of independent harbours. Easy communication and internal telephone systems make questions of distance and situation of personnel of little importance from the Company's point of view.

On the other hand this particular form of administration tends to a narrow outlook, with a lack of complete appreciation of the part which a harbour has to play/
play in developing the commercial prosperity of a district. The Railway management, having its objects fixed primarily on profit-earning from the railway undertaking as a whole, is apt to concentrate only on such trades as will prove remunerative to the railway undertaking. In railway administrations also, many of the disadvantages of a State or Nationalised system are apparent, in particular the lack of contact between those directly responsible for the laying down of policy and the individual local interests whose goods may or may not obtain efficient handling as the result of that policy. Competition between railway interests, as shown in Great Britain, has led not only to the provision of harbours almost national in their extent, where a local system of administration could not possibly have financed an undertaking of such magnitude, but has also shown examples of the provision of redundant facilities which have undoubtedly caused over-capitalisation of the harbour undertakings of the Country.

The rigidity of a Railway system is also responsible for much inefficiency in detail, particularly when men who have not devoted much time to the study of ports are called upon to make impartial decisions which require a breadth of experience which can only be acquired by intensive training in port problems.

Company Ownership.

The history of the financial difficulties experienced by the private dock companies in Great Britain proves that this form of administration is not suitable for ports of a large size which conduct a diverse trade. There are still in existence several small ports which flourish as public Companies, although most of them owe their/
their continued success to peculiarities of geographical situation, or to association with large industrial concerns which are in a position to guarantee them a steady trade. On the Continent there is sometimes a division of function between the Municipality which provides quayage and appliances, and a Trading Company which carries out the operation of the port and all services such as warehousing etc. These latter Companies are backed by the Municipality and are therefore not true forms of Company ownership. Certain other notable ports which have a nominal Company form are closely associated with Ship Canals or other external undertakings, making them more comparable to Railway ownership.

Financial Principles.

Ports can be further grouped in two classes - those which aim at complete self-sufficiency and independence from the point of view of finance, and those which receive financial assistance either from National, State or Municipal sources, or a large Railway Company.

When the port is self-sufficient, the whole of its cost, i.e., working, maintenance, interest on capital and redemption, has to be paid by the interests which make use of the facilities provided. The rates have therefore to be fixed at a comparatively high level in order to cover all these charges, and the whole of the burden has to be borne either directly or indirectly by the trades which pass through the port. This principle is the basis of the administration of the ports owned by Public Trusts or Commissions and Companies, and is usually extremely fair and/
and satisfactory, particularly when applied to a Country in which the standard of national and local taxation is high.

The finance of the other class is based upon the conception that the port is a source of benefit to the whole community in which it is situated, and therefore all the members of that community should contribute towards its cost, irrespective of whether they directly use its facilities or not. The Municipal and State owned ports of Europe and the United States are the most important examples of this form of administration, while Railway owned ports are usually run upon a similar principle. This system, which amounts to subsidisation, enables much more extensive works to be constructed than might be possible were the port self-sufficient, while the lower rates which can be charged directly benefit the users of the harbour by transferring a portion of their burden to others. This system is best suited to agricultural or undeveloped Countries.

General Review.

Ports, irrespective of their statutory or other obligations, are usually actuated by ordinary commercial principles and endeavour to increase their own trade at the expense of their competitors, except where they are restrained by the Government. Their general policy is to increase their facilities to the maximum extent for which there is financial justification and, in some cases, beyond this point. Where their hinterlands overlap, keen competition exists between them. Not only are special facilities provided in order to divert the trade from a rival/
rival, but examples of uneconomic rate-cutting are frequent, particularly where the ports are completely independent, as in Great Britain and the United States. In these two Countries, examples of administration from all points of view are found in active and unrestrained competition. The new construction is out of all proportion to the obsolescence of the facilities and is due, particularly in Great Britain, to the creation of new facilities which, although slightly more efficient than the old, are redundant and overlapping. It is rare for facilities to be utilised even to their minimum economical capacity, and in many of the ports the prosperity of a new extension is merely gained by the transference of trade from another port. The total volume of the sea-borne trade of a Country passing through the ports is outside their immediate control. The provision of new and up-to-date facilities may develop a trade but it will not originate or foster a trade, the possibilities of which are not in existence in the first place. As a general rule, except for completely new industries and the natural growth of established trades, new traffic is only developed in a harbour at the expense of the other harbours with which it competes.

In consequence of this redundancy and the complete lack of co-operation between ports in planning new works with reference to the existing and probable total trade of the Country, the ports as a whole carry an extremely heavy burden of capital debt, Interest and Sinking Fund charges amounting in some cases to as much as 50% of the annual expenditure. This has the effect of maintaining the rates at a relatively high level. When the overseas trade figures for Great Britain before the/
the War, to give one example, are compared with those of the present day, the increase in the Net Registered Tonnage of vessels entering British ports is only 3% greater in 1936 than it was in 1913, in spite of the phenomenal amount of new construction which has been undertaken in ports during the period.

When all the varying systems of port administration are considered as a whole, it appears that the principal disadvantages peculiar to ports, when compared with commercial and industrial enterprises of similar magnitude, are the delays which are often experienced in reaching major decisions and obtaining ultimate sanction for major works, together with the existence, in most Countries, of uneconomic competition leading to the construction of redundant facilities of very high cost.

The administrative organisation outlined below is suggested with a view to creating a form of administration which would be more flexible and more sensitive to local needs and conditions than those at present in existence, while it would require the persons controlling the ports to exercise their minds in a judicial capacity to promote the welfare of ports and overseas trade of the Country as a whole, rather than to promote their own immediate interests. Provision is also made to ensure that they would pay adequate attention to their duties. It is better to base the constitution of the administration upon the presumption of the honesty and competence of the officials and those serving/
serving upon the administrative bodies, with a general power of safeguard, rather than to stress safeguards against possible undesirable circumstances.

Requirements of the Ideal Form of Port Administration.

A study of the various systems of administration which are in existence throughout the World shows that there are certain principles which must be the basis of all port administration, in particular where a large and diverse trade is carried.

There should be in every Country a Central Authority nation-wide in its scope, which would have power to lay down the guiding principle of the policy governing the individual harbours. The administration should lie in the hands of some form of public or national organisation whose interests and decisions should be completely impartial. The local administration of all ports should be conducted upon similar lines, and powers should be given to the Central Authority to prevent uneconomic competition. Each port should have sufficient financial resources at its command to enable it to pay for all working and maintenance and also to finance its cost of construction and any subsequent additions. The Administrative Authority must be in a position to make decisions quickly, to keep in close touch with trade and its requirements, while at the same time it must be a responsible body. Those who direct the Administration must have a highly specialised knowledge to enable them to solve the intricate technical and financial problems which port administration presents, such as can only be obtained/
obtained through a period of training, or, uninfluenced by selfish motives, they must be in a position to pass a reasoned judgment upon such alternative propositions as may be placed before them by experts in the various fields covered by port administration. A competent staff of highly trained officials is required to carry out the routine work of a port. They must devote their whole time to the service of the ports and the consideration of their problems.

Proposed New Administrative Organisation.

There should be a centralised controlling body in each Country, in the form of a Central Trust with national scope, which would treat all ports as parts of a whole. The individual ports should be controlled in local matters by Commissioners and all upon similar lines.

Central Organisation - Functions: The Central Trust should have power to lay down the basic principles of port administration for the Country and to decide all major issues of policy for each port and co-ordinate the efforts of all. Its functions should be judicial rather than administrative. All the financial powers and resources of the ports should be vested in it and all Port Stock, Debt or Loans should be combined in a Central Capital Fund.

This Central Trust should take over all governmental functions, such as those at present carried out by the British Parliament and the French State Departments. Its decisions should be final. It should be administered upon the same principles as those at present governing the Trust Ports, and it should take over/
over the property in the assets of all ports and assume all their liabilities, by way of invested capital or loan debt. It should also control all surplus revenues or deficiencies of individual ports. In the Countries in which there is at present no National form of ownership, it would be necessary for this Central Trust to acquire compulsorily all ports from the Authorities at present owning them, and to give adequate compensation in the case of ports which were run for profit. No such compensation would be necessary in the case of Trust owned ports, which would be relieved of their existing debts in return for the acquisition of trusteeship over their assets. In the case of Countries with a National system of administration, the State would have to receive a capital sum in return for the assets, and it would have to surrender control of the revenue and expenditure, which would be placed in the hands of local Commissions under the control of the Central Trust. In such Countries and newly developed or Colonial Countries it might be necessary for the State to provide part of the capital for the Central Trust, or guarantee the Interest and Sinking Fund.

The Central Trust, through its control over the central funds, should exercise a judicial faculty in deciding the rival claims of the different ports for new facilities or trades. It should be able to see that such trades were routed in the most economical manner, and further, that such new facilities as were required showed sufficient breadth of vision to be adequate for the anticipated requirements of the port for a considerable period, but, at the same time, were not in excess of those requirements viewing the trade of the Country as a whole.
It should also be in a position to construct new harbour works anywhere upon the Country's coastline, irrespective of local financial backing, and it should prevent the construction of obviously redundant facilities where ports were competing for one trade. It should also have powers to require a port to improve its facilities in the event of their becoming obsolescent, or to close ports or portions of them which were out of date and working at a loss, when the trade could be handled more expeditiously elsewhere.

The Central Trust should have the power to lay down the basis upon which the rates levied in the individual ports should be fixed, but should not fix the port's individual rates or concern itself with details of local administration. (The Central Trust could, however, in certain circumstances, be constituted a Court of Appeal, not only upon questions of rates but also facilities, etc.)

The Central Trust should be composed of men who will review all questions in a judicial capacity without favouring or endeavouring to obtain undue favours for any section of industry or the interests they represent. It will be necessary to attract men of high calibre and extremely wide experience, who will carry out their duties from a National viewpoint.

The Central Trust - Constitution: It is proposed that the Central Trust should be composed of about twenty-five members who would represent the various activities which have an interest in ports. The members should serve for periods of five years, and one-fifth of the members in rotation should retire annually and be eligible/
eligible for re-election. It is considered sufficient that there should only be one impartial representative of each category. Trade and shipping representation should balance port official representation with a certain number of Government representatives or nominees, who would be in a position to hold the balance of power. The representatives of a Trade or other Interest upon the Local Commission would elect the corresponding representative upon the Central Trust. Government representatives would be appointed by the Departments concerned, while Legal or other experts could be co-opted by the members already elected or appointed to represent the other port interests. All members of the Central Trust should receive a high remuneration for their part-time services upon the basis of fees for attendance.

For each member of the Central Trust a deputy or substitute member would require to be appointed in the same manner as the principal Trustee, whose place he should take and with whom he should be in consultation. The Trust should meet as a full Board upon all occasions. Leave of absence from meetings would require to be asked and received, except for emergency cases due to health. A measure of non-attendance would result in disqualification from representation upon the Trust. The Trust should settle all matters by vote, the Chairman to have an additional casting vote.

The positions of Chairman and Vice-Chairman should be whole-time and highly salaried. The Chairman should be appointed by the Government Transport Department for his ability to exercise a judicial faculty rather than an administrative faculty. The latter function should be delegated to the Vice-Chairman who would be elected by the/
the members of the Central Trust.

The detailed composition of each Trust would require minor modifications to suit each individual Country, but its constitution should be generally along the following lines:

- **Judicial Chairman.**
- **Executive Vice-Chairman.**

One representative of each of the following:

- Foreign Shipping.
- Home Shipping.
- Coastal Shipping.
- Inland Water Transport.
- Railway Transport.
- Road Transport.
- Lighting and Buoying Service.
- Port Labour.
- Imported Raw Materials.
- Imported Food Stuff.
- Imported Manufactured Goods.
- Exported Manufactured Goods.
- Exported Coal or Minerals.
- The Municipalities.
- Harbour Financial Expert or Economist.
- Legal Expert.
- The Government through Ministry of Transport.
- The Government through Admiralty or Naval Service.

Six representatives of ports according to geographical groups.

It is probable that the Port representative would be the Chairman-Director of the principal port in his group. The actual number of such groups might have to be varied slightly to suit individual needs, as might the number of shipping and trade representatives in accordance with their relative importance and the revenues which they contribute.

**Local Commission - Functions:** The controlling body in each port should be in the form of a Commission which would be constituted and would function in a manner generally/
generally similar to the Central Trust, but dealing only with affairs concerning its own port or local minor ports under its control.

The Commission would be responsible for the finance of its own port, i.e., for its working and maintenance and for the contribution of its quota of the revenue of the Central Trust. It would have powers to execute minor capital works and provide plant out of its own revenues up to a figure to be pre-determined for each port. The sanction of the Central Trust would be required for all items in excess of this, or for which a grant would be needed from the Central Funds.

The rates should be fixed by the local authority in a manner similar to that at present in force in the Trust owned harbours. The rates derived from the trades normally handled by the harbour should be sufficient to cover the working expenditure and maintenance of the harbour, and the capital cost of all smaller items of plant below a certain figure, together with the Interest and Redemption charges of its share of the Central Capital Fund. This share might be made proportionate to the average tonnage of vessels or value of goods passing through the port over a number of years. The fairest distribution of these charges is that at present in vogue in many ports. The total charge should be approximately equally divided between vessels and goods, and the individual charges varied in accordance with the expense of the accommodation required by the vessels and the regularity or otherwise of their sailings, and the ability of the goods to pay in accordance with their intrinsic value.

All ports, while retaining a large measure of independence/
independence, would function as parts of the same organisation with consequent interchange of plant and personnel and the resulting economies where unnecessary duplication had occurred.

As in the Central Trust, the functions of the Commission should be more judicial than executive. It should decide all questions by vote. It is intended that it should only lay down the principles of the detailed policy, and decide issues of major importance, leaving all minor matters of routine for the decision of the chief official and execution by the routine staff.

Local Commission - Constitution: The Commission should be composed of about fifteen members, appointed or elected by those qualified to do so, to represent the various activities which have an interest in the port. The members should serve for periods of five years, and one-fifth of the members in rotation should retire annually and be eligible for re-election. There should be only one representative in each category, assisted by a deputy or substitute member, who would be permitted to attend meetings but only to vote when the principal member was absent.

The Commission should be presided over by a Chairman-Director who, in addition to his duties as Chairman of the Commission, would act as General Manager of the port and occupy a highly salaried full-time position. He should be appointed for life or until retiral under age limit. He should be assisted by his full-time Chief Engineer who should also have a seat upon the Commission and a voice in its deliberations (that is if the Chairman-Director did not act as Engineer as well). The other members of the Commission should be elected or appointed to represent the individual needs of the port in question/
question, the constitution being upon the following lines:-

Chairman-Director.
Harbour Engineer.

One representative of each of the following:-

Foreign Shipping.
Home Shipping.
Coastwise Shipping.
Inland Water Transport.
Railway Transport.
Road Transport.
The Government through the
Ministry of Transport.
Port Labour.
The Municipality.

Six representatives of the Traders,
appointed by Chambers of Commerce,
Corn Exchange, Exporters Association,
etc., in accordance with the tonnage
of trade passing through the port or
the revenues contributed.

The members of the Commission should receive
remuneration upon an attendance basis but upon a scale
suited to compensation for loss of time, and expenses.
A measure of non-attendance would constitute a dis-
qualification.

For the ports of very large size a Commission
similar in constitution to the Central Trust might be
required, while for minor ports the number of members
could be reduced. Small ports should be placed under
the jurisdiction of adjoining ports of larger size and
operated as a part of them.

The Chairman-Director: The Chairman-Director
should be responsible for all matters of routine,
discipline and adjustment, the intention being so to
strengthen his position that he would be, for the
individual port, the final authority for all matters
except those involving questions of policy, capital
expenditure and questions of rates or disputes involving
considerable/
considerable sums of money. He should be given complete jurisdiction upon all matters involving money of a sum below a figure to be pre-determined by the Central Trust, in accordance with the size and trade of the port which he was administering, and a clear ruling would have to be given as to what was within his competency. In this routine work he should receive the advice and assistance of his Commissioners with whom he should work in accord. It is proposed that his powers should be akin to those of the Managing Director of a Firm.

The Chairman-Director would be appointed by the Local Commission, subject to the approval of the Central Trust. In the event of the majority of the Commission experiencing extreme dissatisfaction with his policy or abilities upon matters within his competence, they should have the right to appeal to the Central Trust for his dismissal, before whom he would have the right to appear. The Chairman-Director would carry out all matters of routine administration through the subordinate officials. These officials and the routine staff of the various harbours would form parts of a whole. Thus the services of a specialist in one harbour would be at the disposal of any other harbours, should they be required. The recruitment of staff would be somewhat upon the lines at present in force in Trust administered harbours. Vacant positions in a port would be filled by promotion of the staff in that port or by transference of staff from another port.
THE ADMINISTRATION OF PORTS.

PROPOSED ORGANISATION.

THE CENTRAL TRUST.

Foreign Shipping
Home
Coastal or Inland Shipping
Railway Transport
Road Transport
Lighting and Buoying
Port Labour
Raw Materials (Import)
Foodstuffs
Manufactures
Coal or Minerals (Export)
Manufactures

Municipality
Harbour Engineering Expert
Finance
Legal Expert
Government Transport Ministry
Government Adm.
Representative Ports Group A

B
C
D
E
F

Judicial Chairman.
Executive Vice Chairman.

Port Commission Port Commission Port Commission Port Commission Port Commission Port Comm. Etc
A
B
X
Y
C
Z

THE LOCAL PORT COMMISSION.

Foreign Shipping
Home
Coastal or Inland Shipping
Railway Transport
Road Transport
Port Labour
Municipal

Trades P
Q
R
S
T
U

Chairman — Director

Manager or Secretary
Harbour Engineer
Treasurer
Harbour Master

NOTE: — Representatives of a Trade or other Interest upon the Local Commissions would elect the corresponding representative upon the Central Trust.
## APPENDICES, AUTHORITIES, etc.

Administration by Statutory Trust or Commission.  

<table>
<thead>
<tr>
<th>Authority</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>The Port of Dundee</td>
<td>48.</td>
</tr>
<tr>
<td>The Port of London</td>
<td>56.</td>
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<tr>
<td>British Dominions etc.</td>
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National Administration. 

<table>
<thead>
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<tr>
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Municipal Administration. 

<table>
<thead>
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<tr>
<td>Low Countries and Scandinavia</td>
<td>124.</td>
</tr>
<tr>
<td>Germany</td>
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Railway Administration. 

<table>
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<tr>
<td>Private Ownership.</td>
<td>161.</td>
</tr>
<tr>
<td>Port Authorities Association.</td>
<td>164.</td>
</tr>
<tr>
<td>Port Authorities etc. Consulted.</td>
<td>168.</td>
</tr>
</tbody>
</table>
Administration by Statutory Trust or Commission

is entirely British in origin, though many Ports throughout the World, and in particular the British Dominions, have adopted a system of administration on the British pattern, or have modified their existing systems in view of British experience.

The Statutory Trust is the outcome of the peculiar conditions in the British Isles and a direct result of the conditions imposed as the result of the Industrial Revolution, and the system of Parliamentary Government which exists in Great Britain, together with the laws governing Public Bodies and Undertakings which have been in force for the past hundred years. The commercial ports of Great Britain are all of great antiquity and the historical background must be kept in mind when considering how this particular form of administration grew up, the reasons for its existence, its strength and its weakness.

Until the commencement of the Industrial Revolution over a hundred years ago, most of the ports of Great Britain were in the hands of interests which were not primarily connected with shipping matters, such as Towns and Burghs, or by the local landowners, who managed them in their own interests and not in the interests of those who made use of the facilities provided. Further, most of the ports and works connected with them were in a dilapidated condition, and the private individuals who owned them had no resources to put them in good condition, nor were the Towns which were responsible for them willing that their citizens should bear/
bear the burden of the cost of maintaining efficient ports, and further, the system of limitation of liability for undertakings had not been devised.

With the rapid growth of shipping at the close of the Napoleonic Wars, those persons connected with shipping realised that they must take a hand in the management of their affairs in order to get adequate facilities provided for the ships which were rapidly increasing in size, and they also saw that it was beyond the powers of any private individual to raise sufficient money to carry out works of an adequate size to meet their needs. They therefore arranged, with the approval of Parliament, to appoint Trustees or Commissioners to administer the ports, keeping in view the interests of those people - Traders, Shipowners, Shippers, Brokers and the like, who actually needed these increased facilities. The control of the larger ports was taken by special Act of Parliament from the hands of the private individuals or Towns which owned them and placed in those of Trustees or Commissioners who were elected or appointed to represent the various interests concerned with ports.

These Acts were individual, and a special Act was required for each port undertaking. The Acts were drafted with a view to ensuring that the ports would be administered for the public good and provided that the ownership of a port should become vested in the hands of a body of public men who would act as Trustees for the port. The Boards were given powers to hold the land and make contracts in the same manner as private individuals or Companies, although no limitation was placed upon their liability. They were given powers of raising money upon the/
the security of their revenues as apart from their property and were also given power to acquire property or to execute works. In all cases the works were clearly defined and the borrowing powers limited, and it was laid down that whenever additional works or additional borrowing powers were required, these Trusts must place their proposals before Parliament and obtain its sanction, while details of all new works below high-water mark must be submitted to the Board of Trade for approval.

The Rates were also generally placed under Parliamentary control, in that maximum and in some cases minimum rates were fixed by Parliament, the Trustees only having powers to reduce the rates or to vary them within specified limits, without the express approval of Parliament to alter their rates outside those limits.

Although the constitution and functions of nearly every Port Trust in the British Isles differs from every other Port Trust, the principles which underlie the system are the same, variations being merely matters of detail as the result of the peculiar local conditions and interests which require representation upon the Harbour Board.

The ultimate responsibility of the whole undertaking as to its finance, management, etc., rests in the hands of voluntary Trustees who generally receive no remuneration for their services and have no personal financial responsibility for the undertaking whose policy they dictate.

The individual members of the Board represent the varying interests in different ways in different localities. On nearly all Boards there are a certain number of members elected by payers of port dues, shipowners/
shipowners, electors on a Municipal or Poor-law valuation basis, Stock-holders, etc., while there are also members appointed by local Municipal bodies, County Councils, Chambers of Commerce, Trade Guilds, Government Departments, and other interests. In some cases there are also certain members of the Board ex officio, such as Lord Provosts, Lord Mayors, Members of Parliament, etc.

These Trustees elect one of their number as Chairman (unless the Chairman is appointed ex officio) and form themselves into Committees under the convenership of individual members who are elected for the purpose. The Harbour Trusts, either as a whole or through their Committees, take the entire responsibility for matters of general policy, fixing of dues, framing of regulations, making of bye-laws, and executing the ordinary business of the port. They settle all questions by vote and there is no appeal against their decisions, which are final unless a rescinding motion is passed. They meet at regular intervals, meetings of the full Board being usually held monthly with meetings of the various Committees and Sub-Committees weekly or even daily in the large ports. A statutory number of members forms a quorum, often as small as one-third or one-quarter of the full Board.

In all their deliberations the Trustees are served by a staff of officials to whom is delegated the responsibility for all routine management and the carrying out of the policies upon which the Boards have decided. The senior officials are present at all meetings of the Board or their Committees in a consultative capacity, but they have no personal voice in their deliberations, although they themselves usually originate and advise upon the policies which the Trustees adopt. They are the servants/
servants of the Board of Trustees, whose orders they have to carry out, but all matters of routine management are usually delegated to them.

The officials most commonly found are a General Manager assisted by an Engineer, a Treasurer, a Clerk or Secretary to the Trust, and a Harbour Master. These officials are responsible for all matters of management, routine, and discipline in their respective departments. As a rule all the chief officials are appointed directly by the Board though they may be subject to the authority of the General Manager. The procedure usually followed is to advertise the vacancy and appoint either an assistant from some larger port or a head official of some smaller port to the position, if none of the port's employees are suitable for promotion. The officials usually appoint their own staff, for whom remuneration may be fixed per scale or in accordance with the wishes of the Board.

The Trustees have certain statutory duties placed upon them, the chief of which is the efficient management of the port and the provision of adequate facilities for the trade of the district or for such trade as may be reasonably expected to materialise. It is in the general interests of the users of the port that the charges made for the facilities must be a minimum.

Parliament has therefore laid down the manner in which surplus revenues may be utilised after the charges for ordinary expenditure and Interest and statutory Sinking Fund have been met. All such surplus revenues must be devoted either to the improvement of existing works, the construction of new works, the reduction/
reduction of debt, or the reduction of dues.

Ports generally have no fixed capital, and like the British Government and many Municipalities, they live on borrowed monies. They are authorised by their Acts of Parliament to borrow money up to certain limits to cover capital expenditure, the period within which this money must be repaid being generally fixed in their Acts, which provide that the whole debt must be extinguished within a certain period, which may be as much as sixty or eighty years, and that annual provisions must be made by way of Sinking Fund for the reduction of this debt by a corresponding amount each year. The money is usually borrowed for comparatively short periods at the current rates of Interest ruling for first-class securities, and when the individual bonds expire, fresh ones are issued for varying periods so long as the money is required. The ports are thus free to borrow in the cheapest market.

The Trustees are thus enabled to raise, for a comparatively small annual payment, capital sums far in excess of those which would be obtainable by private enterprise in the open market at low Interest, and further, as only the revenues can be pledged as security, the Trustees remain in possession of the heritable property in perpetuity, no matter what circumstances may arise.

The problems which the Trustees of a harbour have to face are therefore rather different from those of the average Board of Directors of a Company. The main difference is that a Trust Port is not run for the purpose of gain but solely in the interests of the users. It should just pay its way and no more.

The procedure which has to be followed when a Harbour Board proposes to execute some extensive new works/
works is approximately as follows:

After the designs and estimates have been prepared by the Engineering staff and approved by the Board, the approval of Parliament has to be sought by way of a Provisional Order or Private Bill. Parliament must be satisfied that there is a need for the works to be constructed and that no private interests will be deleteriously affected without adequate compensation being made, and that the additional revenue expected will meet the maintenance and Interest charges, or that there are already surplus revenues available. If the scheme for financing the project is sound, Parliament will approve of the scheme, defining the limits of the works and the period within which they must be constructed, and will then grant the necessary borrowing powers, laying down the terms upon which the money is to be raised and repaid. If the works are not executed within the period laid down by Parliament, they must be re-approved or an extension of time granted. Only the broad outlines need to be submitted to Parliament, and considerable alterations in design etc. can be made without consultation or approval provided the permitted limits of deviation are not exceeded. After the final approval of the scheme by both Parliament and the Harbour Board, the work is usually carried out by public contract. The Government, through Parliament, thus exercises a somewhat indirect and loose control over the Authorities and rarely interferes unless the project is unsound or is contrary to the public interest.

The execution of all contracts of a major nature is usually placed in the hands of firms of independent contractors. Many of the ports are under a statutory obligation to advertise all contracts for public tender in certain/
certain specified channels, for all works in excess of a certain amount, in some cases £100. This, however, does not prevent many ports from carrying out extensive works departmentally by means of the regular port staff, all maintenance work being, with few exceptions, carried out in this way.

General Comments.

The British Port Trusts were, however, formed in an atmosphere of complaint and distrust and they were constituted with a large number of members so that almost every possible group of persons having an interest in the port would receive representation thereon, in order to safeguard the interests which they represented.

The functions of the majority of the members of these Boards are more critical than constructive and in actual practice the administration and formulation of policy lies in the hands of a limited number of members who gratuitously devote a large part of their time to their duties. The remainder of the Board gives much less time and consideration to harbour matters.

When the Conveners and Officials work in harmony and have the confidence of the rank and file of the Board, the system leaves nothing to be desired, but when there is conflict of opinion between the officials and the senior members of the Board, or of interest between the constituent members of the Board, the members do not show that impartiality which is desirable, but tend to join in groups or factions who vote from personal motives or from opinions which have been somewhat hastily formed. Difficulty is often encountered in finding men of ability who/
who will give the time required, and it frequently occurs that the final vote will be taken by men who have not a complete grasp of the significance of the problem which is receiving consideration.

Although up to the present in Great Britain political motives have been almost entirely absent in Port Administration, with the intrusion of Party politics into Municipal affairs, political, as apart from purely engineering or managerial administrative policies have become noticeable, largely through the presence of Municipal representation on the Harbour Boards, the Municipal representatives having been elected on a Party basis.

Large Boards tend to sub-divide in a somewhat Party manner, the members grouping together in accordance with their policies and personal likes or dislikes. The leader of the group will probably give the business his very careful consideration, but his section will follow his suggestions without much thought when the final vote is taken. It is naturally customary to appoint Committees to contain one or two representatives of each group of thought, but when a Board is large the majority of the constructive thinking is left to the willing few who have the time to devote to their responsibilities. There is always a danger that sound proposals put forward by the Conveners and Officials who have superior knowledge and breadth of vision may be over-thrown as the result of the uninterested few who vote without knowledge, experience or careful consideration.

In considering the question of the attendance of individual members of the Port Trusts, it must be realised that there are varying factors which either tend/
tend to promote or to detract from good attendance at Board or Committee meetings. Such factors, apart from the actual size of the Board, are the hours at which the meetings are held and whether or not meals are given on the premises to save time. Certain Boards require a minimum attendance to enable a member to remain upon the Board, while others do not. Although in nearly every case the services of the Trustees are given free, some of the representatives, especially if they are appointed on a political basis, receive compensation from outside sources for their time given in attending meetings, to encourage their attendance.

An examination of the returns of attendances of members, from figures supplied by the principal ports, shows that where the total membership of the Board is small — say fifteen members — the percentage of attendance is excellent, being in the region of 80%. The percentage attendance of members becomes progressively worse as the size of the Board increases, with the exception of London and Liverpool whose members appear to appreciate their responsibilities fully. The average attendance for a Board of over twenty-five members varies from 60% to 65%. This means that for a large Board the average attendance is slightly under two-thirds of the membership.

A close study of the individual attendances reveals the fact that this percentage is arrived at, not through each individual member consistently attending two-thirds of the meetings, but through the excellent attendance of some, outweighing the bad attendance of others. Approximately ten members of a Board, irrespective of its size, have an attendance at meetings of/
of 75% and over, while the bulk of the Board are somewhat below the average figure, with a limited number of persons whose attendances are comparatively infrequent, falling in some cases as low as 2%.

An examination of the interests whose representatives have bad records shows that such persons usually represent the interests more remotely connected with the work of the harbour, or persons (Provosts, Mayors, etc.) who, having a seat on the Board ex officio, are prevented by other official duties from regular attendance at meetings. This occurs particularly in the large Boards where an endeavour has been made to obtain a representation of a wide variety of interests, some of them remotely connected with the harbour, such as local County Councils, etc., or where there are several representatives of one interest. Such members take little active part in the administration except under pressure and when they do they record their votes upon subjects upon which they have not heard the previous full deliberation of the Board, but upon whose findings their vote may have a profound effect.

It is impossible to give a measure of efficiency or the actual constructive work done by the members of the Board who attend the meetings. It is well known and confirmed by responsible persons in nearly all the harbours that the majority of the constructive work is done by a very limited number of members, somewhat smaller that the number of those having a 75% attendance and over, while the rest of the Board merely form their own judgments upon such matters as are placed before them, but take little active part in the constructive work of the Board.

At a first glance the 60% average appears quite satisfactory, but with such an attendance, one-third of the/
the Board, by simple majority vote, is able to dominate the policy of the Board, while the grip of the average member whose attendance averages two meetings out of three, cannot be very great.

Ports which are controlled by small Boards appear to have lost nothing in efficiency or in fair treatment. The figures tabulated show that it is rarely necessary for the Board to be constituted with more than fifteen members, provided such persons are in a position and willing to devote the necessary time to give full attendance to port affairs.
### Table Showing Particulars of Constitution of Certain Public Dock and Harbour Trusts in the United Kingdom

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<thead>
<tr>
<th>No</th>
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<th>Elected Members</th>
<th>APPOINTED MEMBERS</th>
<th>No of appointed Members</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Payers of Port Dues</td>
<td>Ship-owners,</td>
<td>Elected on Municipal Poor Law Valuation basis,</td>
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</table>

*Chamber of Commerce.*
# Port Trusts or Commissions

## Table of Attendances at Meetings

<table>
<thead>
<tr>
<th>PORT</th>
<th>Board Meetings</th>
<th>Special Committee Meetings</th>
<th>Totals</th>
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<tr>
<td></td>
<td>Passable Heated</td>
<td>Unheated</td>
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</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
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<tr>
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<td>566 331 58 8 26 0 10 32</td>
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<tr>
<td>Belfast</td>
<td>22 834 491 59</td>
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<td>OTHER DETAILS NOT AVAILABLE</td>
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## Municipal Authorities

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<th>England</th>
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<tbody>
<tr>
<td>11</td>
<td>80</td>
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</table>
GLASGOW.
DIVISION OF TRUST RESPONSIBILITY, ETC.

THE BOARD OF TRUSTEES. 42 MEMBERS.
Meets 1st Tuesday of Month for transaction of general business.
with Special Meetings as required. Quorum 15.

THE COMMITTEE OF MANAGEMENT. 42 MEMBERS.
Meets as often as necessary. Quorum 15.

COMMITTEES.

- Law & Parliamentary Bills. 15 members. Q. 3.
- Superannuation Fund. 15 members. Q. 3.
- Workshops Mechanical Appliances. 15 members. Q. 3.
- Traffic and Storage. 15 members. Q. 3.
- Rates. 15 members. Q. 3.
- Shieldhall and Renfrew Docks Scheme. 16 members. Q. 3.
  (Special Committee)

GENERAL MANAGER AND SECRETARY.

- Mechanical Engineer
- Harbour Master
- Treasurer
- Commercial Manager
- Collector
- Traffic Sup't
- Granary Sup't
- Stores Superintendent
# Prior to 1809
The Magistrates and City Council of Glasgow

# 1809–1825
The Lord Provost, Magistrates and Council of the City of Glasgow as separate Statutory Trustees.

# 1825–1840
The Lord Provost, Magistrates and Council of the City of Glasgow, and five other persons interested in the Trade of the Clyde, nominated and appointed by them.

## 1840–1858
**Representing the Town of Glasgow:**
- The Lord Provost: 1
- Baillies: 5
- The Dean of Guild: 1
- Members of the Town Council: 15
  - **Total:** 23

**Representing Commercial Interests:**
- Chosen by the Chamber of Commerce: 2
  - " " Merchants House: 2
  - " " Trades House: 2

**Representing Other Burghs & Councils:**
- Named by the Baillies and Burgesses of Forth: 2
- " " Magistrates and Council of Lanark: 1
- " " Anderson: 4
  - **Total:** 33

## 1858–1905
- The Lord Provost: 1
- Town Councillors of Glasgow: 9
  - Chosen by the Town Council: 10

## 1905–Present Day
- Chosen by the Corporation of Glasgow: 12

**Elected**
- Elected by Shipowners and Ratepayers: 3

**Represented by County Council of Lanark:**
- Chosen by the Cornhill of Commerce: 2
  - " " Merchants House: 2
  - " " Trades House: 2

**Total:** 42
THE PORT OF DUNDEE.

The Port and Harbour of Dundee, situated on the north bank of the River Tay about ten miles from its mouth, serves as a good example of a Trust Administered Port. It is one of the medium sized ports of this Country, as the total Net Registered Tonnage of vessels visiting it was 1,186,797 in 1936, and so far as has been ascertained, was the first port to be administered by a Trust.

Its constitution is typical of all such forms of administration and embodies nearly all the features which are found in other ports, whilst its history provides a simple account of the growth and development of such an undertaking, without the complications which are found in ports of a larger size.

The locality was used as a harbour of refuge in pre-historic times owing to the natural protection afforded against easterly gales, and the use of Dundee as a port is recorded as early as 1040. In the thirteenth century, Dundee was used as a harbour for import, and in 1352 Charter was granted to the Town in which privileges and "specially the Petty Customs, Ports, Piers, and Shore Dues" were mentioned.

The Port of Dundee remained under the control of the Town during the ensuing centuries and experienced a growing trade, and in 1799 the harbour consisted of a small tidal basin protected from storms by breakwaters of rubble, and a landing wharf. The Town Council, which was then the controlling body, does not seem to have made a real effort to provide adequate facilities, but rather to have/
have looked upon the port as a source of revenue for Town purposes, as it is on record that although between Martinmas 1764 and July 1815, the Town Council collected Harbour Dues to the amount of £38,696., they only expended £9,468., on piers, etc., applying the balance for the general uses of the Burgh.

In the years 1810 to 1813 there was considerable outcry and general dissatisfaction expressed that the harbour should be allowed to continue in a state of disrepair, and the Town Council, in 1814, were obliged to promote a Bill, and after negotiations an Act was passed on 4th. July 1815 which placed the harbour under Commissioners for twenty-one years. The Commissioners were as follows:

- The Provost.
- Four Bailies.
- Dean of Guild.
- One common Councillor.
- Five members of the Guildry.
- Three members of the Nine Incorporated Trades.
- Four persons possessed of land in the County of Forfar.
- The Boxmaster of the Masters and Seamen Fraternity in Dundee.

Twenty members in all.

No person was eligible to be a Commissioner unless he was possessed of land or burgh property in the County of Forfar, to the value of £50 sterling annually, or a personal estate to the amount of £300 sterling at the least. The newly appointed Commissioners received powers to carry out extensive works designed by Thomas Telford. The foundation stone was laid on 9th. October 1815, but it was not until 1823 that the first section of the works was publicly opened.

During the period 1815-1829 the sum of £162,500 was/
was expended on the port, while the tonnage of vessels "entering" increased from 70,000 in 1815 to 165,000 in 1829, and the harbour revenue rose from £4,411 in 1815 to £11,173 in 1828.

Under the Act of 1815 the harbour was to revert to the Town in 1836, but in August 1829 the Harbour Commissioners came to the conclusion that a new Bill should be promoted as the improvements effected had afforded such facilities as had enabled the merchants and manufacturers to treble the extent of their trade since 1815, and that, if the trade increased in the same ratio, additional extensions for shipping would be required.

The Town Council objected to the Bill, asserting that the harbour and its ancient dues were part of the Corporation Estate, and protesting against any of the revenue of the harbour being used for the promotion of the Bill, and presented a Bill of Suspension and Interdict. Traders and others voluntarily subscribed money to the amount of £1,816 to meet the expense of the Bill and the Commissioners brought the Bill before Parliament. On the 17th. June 1830 the Royal Assent was given to the Act, which placed the harbour under Trustees in perpetuity, the constitution being as follows:-

The Provost.
Four Bailies.
Dean of Guild.
One common Councillor.
Five members of the Guildry.
Three persons from the nine Incorporated Trades.
Four persons possessed of landed property in the County of Forfar.
The Boxmaster of the Masters and Seamen Fraternity in Dundee.
One from the three United Trades.

Twenty-one members in all.

These/
These Trustees were served by the following officials: - Resident Engineer of Harbour Works, Clerk to the Trustees, Treasurer, Collector of Shore Dues, Berthing Master, and others.

Prior to the 1830 Act, persons who were not Burgesses had to pay 50% above the schedule rates, and 50% above the schedule was also charged in respect of vessels not registered at Dundee, but, under the new Act, there was no differentiation, and all were charged equally. Under the provisions of the Act, negotiations took place between the Town Council and the Harbour Trustees and eventually £27,500. was agreed on as the purchase price of the harbour. The Town Council finally granted a Feudal Conveyance of the Port and Harbour to the Trustees, although it reserved the right to certain plack dues, the fish customs, and other curious rights which they had been in use to levy as Patrons of the Kirk Fabric Fund, and the Hospital of the Burgh, these dues being finally discharged in 1900 on payment of £14,000 by the Trustees to the Town Council.

By 1866 the total tonnage of the port had increased to 395,260, and with this influx of traffic and the prospect of a steady increase, the Trustees arranged to provide additional facilities and in 1869 an Act was passed authorising the Trustees to construct a tidal basin and entrance to the Camperdown Dock, and to carry out other works. The Act also altered the representation on the Trust, which became constituted as follows: -

The Provost.
Four Bailies.
Dean of Guild.
The Boxmaster of the Fraternity of Masters and Seamen in Dundee.
The foregoing became ex officio members, and the following were elected annually:—

Five members by the Guildry Incorporation.
Three members by the nine Incorporated Trades.
One member by the three United Trades.
Four members by the Commissioners of supply for the County of Forfar.
Three members of the Chamber of Commerce.
Three members by the Shipowners of Dundee.
Three members by the Harbour Ratepayers.
Two members by the Municipal Electors.
One common Councillor.

The membership was thus increased from twenty-one to thirty-two.

The Dundee Harbour Consolidation Act, 1875, did not change the constitution of the Trust, but gave the Trustees additional powers, the principal item being the transference of the Lighting and Buoying of the River, and the right to levy dues in connection therewith, from the Corporation of the Fraternity of Masters and Seamen in Dundee to the Trustees. These rights had been held by the Fraternity under an Act of the Privy Council of Scotland dated 24th. February 1687, but the Fraternity had got into financial difficulties of which the Harbour Trustees relieved them, at the same time improving the lighting and buoying of the approaches.

Further Acts were passed in 1889, 1892, 1896 and 1900, giving the Trustees power to undertake new works, increase their borrowing powers, revise their schedule of rates, etc., while the Dundee Harbour and Tay Ferries Consolidation Act, 1911, now the principal Act, gave further powers in the same direction and brought about important changes in the Constitution. The membership of the Trust is now composed of one member nominated by the Admiralty and thirty-two members elected as follows:—
Eight by the Corporation of Dundee.
Two by the Guildry Incorporation of Dundee, the nine Incorporated Trades of Dundee, and the three United Trades of Dundee.
Four by the County Council of the County of Forfar.
Six by the Chamber of Commerce of Dundee.
Four by the Shipowners.
Six by the Harbour Ratepayers.
Two by the Municipal Electors.

During the time the harbour was under Commissioners, and from the passing of the Act of 1830, the Provost or the Lord Provost for the time being was ex officio Chairman of the Board, but the Act of 1911 made provision for the Trustees electing, each year, from among their number, a Chairman and a Deputy Chairman.

The Dundee Harbour and Tay Ferries Order Confirmation Act, 1912, amended the qualifications of electors entitled to vote at the election of Trustees by the Shipowners, and subsequent Acts passed in 1917, 1919, and 1925 gave the Trustees powers to borrow additional monies, and to increase the rates.

The trade of the port has developed rapidly throughout the years until now the yearly Net Registered Tonnage of vessels is over one million tons. The revenue in the hundred years 1830 to 1930 rose from £12,000 to £171,000, and in spite of rate reductions amounted to £140,000 in 1936. The sum of £1,736,000 has been expended upon the harbour works up to 1936, but owing to the efficient manner in which the undertaking has been administered, particularly during the last thirty years, the total debt of the undertaking is only £346,000.
### Prior to 1815

The Town Council of Dundee

<table>
<thead>
<tr>
<th>Year</th>
<th>Representing the Town of Dundee</th>
<th>Representing Commercial Interests</th>
<th>Other Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1815-1830</td>
<td>The Provost 1, Bailies 4, Dean of Guild 1, One Common Councillor 1</td>
<td>Representing the Guildry 5, Nine Incorporated Trades 3</td>
<td>Possessors of Land in County of Forfar 4, Boxmaster of Masters and Seamen Fraternity 1</td>
</tr>
<tr>
<td>1830-1866</td>
<td>The Provost 1, Bailies 4, Dean of Guild 1, One Common Councillor 1</td>
<td>Representing the Guildry 5, Nine Incorporated Trades 3, Three United Trades 1</td>
<td>Possessors of Land in County of Forfar 4, Boxmaster of Masters and Seamen Fraternity 1</td>
</tr>
<tr>
<td>1866-1911</td>
<td>The Provost 1, Bailies 4, Dean of Guild 1, One Common Councillor 1</td>
<td>Representing the Guildry 5, Nine Trades 3, Three Trades 1, Chamber of Commerce 3, Shipowners of Dundee 3</td>
<td>Commissioners of Supply 4, Borough Representatives 3, Municipal Electors 2, Boxmaster of Masters and Seamen Fraternity 1</td>
</tr>
<tr>
<td>1911-Present Day</td>
<td>Elected by Corporation of Dundee 8</td>
<td>Elected by the Guildry, the Nine Trades and the Three Trades, etc. 2, Elected by the Chamber of Commerce 6, Shipowners 4</td>
<td>The County Council of Forfar 4, Harbour Representatives 6, Municipal Electors 2</td>
</tr>
</tbody>
</table>

**Note:** Up till 1911 the Provost was ex officio chairman. Now a chairman and Deputy Chairman are elected annually by the Trustees from among their number.
DUNDEE
DIVISION OF TRUST RESPONSIBILITY, ETC.

THE BOARD OF TRUSTEES — 33 MEMBERS.
Meets 1st Monday of Month with Annual General
Meeting following the third Tuesday of November.
Quorum 7. Special Meetings as required.

SPECIAL COMMITTEES

Chairmen's Committee
12 members, Q is C and 3

Surveys of Goods
7 members, Q is 2

Warehousing
12 members, Q is C and 3

Licensees
7 members, Q is C and 3

Wages
13 members, Q is C and 3

Loans & Interest
7 members, Q is C and 3

GENERAL MANAGER AND ENGINEER.

* Clerk
* Treasurer
* Harbour Master
* Supt. Tay Ferries
* Assist. Engineer
* Managerial Staff
* Works Yard
* Traffic Superintendent.

NOTE: — The Officials marked thus * attend meetings of the Board and certain committees, and answer questions put by Trustees.

Q = Quorum. C = Chairman.
London, the largest Port in the World, is also one of the most ancient. Its growth throughout the Century has been steady if haphazard and the control of its facilities has been in the hands of many Organisations. The first wharves were owned by the City or the merchants who used them, but the prosperity of London was built up during the nineteenth century by systems of docks controlled by Companies operating for profit. These were superseded less than thirty years ago by the Port of London Authority, a Trust in which many of the competing elements were fused, though a large number of privately-owned wharves are still independent and handle a considerable trade.

London was a port of some note in Roman times, and although it fell into disuse during the middle ages, by the time of the Norman Conquest it had regained its importance, and in 1236 the Hanse merchants frequented London in large numbers. It was, however, the sacking of Antwerp by The Duke of Parma in 1585 which diverted the trade of Europe to London and gave London its position as the commercial centre of the World.

During the seventeenth and eighteenth centuries the trade was carried out at wharves lining the banks of the river, these wharves being in the hands of private owners under a measure of supervision from the City.

About the year 1800 a new era commenced with the initiation of the present system of docks. Following upon the petition to Parliament in 1796, which favoured the construction of docks in preference to open wharves, a body of West India merchants obtained permission to build/
build a dock, opened in 1802 under the name of the West India Dock. Three years later the London Dock was opened, also by private enterprise, to be followed by the East India Dock in 1806 and a succession of other Docks until the construction of the Tilbury Dock in 1886. All these Docks belonged to private Companies and their history provides the only example of Port Administration by private enterprise upon a large scale.

The History of the Dock Companies: The Act of Parliament for the making of the West India Dock was the first legislation of its kind. In the case of Liverpool, where powers had been given by Parliament to make docks, the authority had been conferred on the Municipality. The decision to let private Companies develop the resources of the Port of London was largely due to the long opposition of the City to Port Reform and its half-hearted policy towards removing the abuses which had sprung up during the previous century.

The Board of Directors of the Company was comprised of thirteen stockholders, four Aldermen of the City and four members of the City Common Council, the Municipal representation being to ensure smooth working and representation of the City, as the Corporation of London were permitted to contribute to the stock of the Company. During the first twenty-one years from the completion of the docks, all vessels arriving from any port in the West Indies had to unload the whole of their cargoes within the West India Dock system, under penalty of forfeiture of the vessel and a fine of One hundred pounds. The monopoly so created afforded the requisite guarantee that the proprietors of the Company would receive a satisfactory/
satisfactory return on their capital, but at the same time it entailed heavy losses to the individual owners of the local quays, although Parliament awarded such persons some measure of compensation for the loss of their trade. The Company was granted powers to charge rates on vessels and goods. A departure in the Company's activities was the provision, in addition to quay space, of facilities for the safe warehousing of goods and this unity of control between dock owning and warehousing has always been a major characteristic of London Port administration.

The West India Dock scheme had no sooner been authorised than rival schemes were put forward by the London Dock Company and the East India Docks Company.

On the south side of the river the system of docks now known as the Surrey Commercial Docks sprang into being from the year 1807 onwards, the docks originally forming the property of four Companies. The Surrey docks were granted no special privileges and for many years after their inception were unremunerative to the proprietors, it being only in the latter period of their history that they became prosperous.

The West India Docks proved an immediate success. Shipowners were able to discharge their vessels in three to four days as against a month. The proprietors of the Company found that they had an excellent investment, receiving 10% on their money once the dock had been opened and the trade established.

The London Dock Company also fared quite well, paying 4½%. The third Company was more successful, as the East India Docks Company paid dividends varying from 6% to 10%.
The period of twenty-one years privilege granted to the West India Dock Company expired in 1823 and the Company applied to Parliament for a renewal. Largely owing to the high rate of profits and charges and the opposition on the part of the London Dock Company, whose own privileges would lapse three years later, the extension was not granted, Parliament voting in favour of unlimited competition amongst the docks.

The immediate result was the formation of the St. Katharine Dock Company, whose dock was opened in 1828. This dock largely competed with that of the existing London Dock Company and the return on the capital fluctuated between 3½ and 5%. The West India Dock Company was able to maintain the better rate of dividend, but competition at last caused it to fall to 4¼% in 1837. The disadvantages of this competition for a trade which was not sufficiently extensive to fill the complete system, led to a succession of moves in favour of amalgamation, and in 1837 the West India Dock Company amalgamated with the East India Docks Company.

The next development was the construction of the Victoria Dock opened in 1855, as the existing docks on the Thames were unfit to receive vessels of a larger size than those coming to the Port, owing to the development of steam and the rapid growth in the size of ships about that time. The Victoria Dock was at once a financial success as it had been built where land was cheap and its capital cost of construction was small.

The year 1864 was marked by further amalgamations on the part of the Dock Companies to reduce existing competition and under the threat of further competition from new docks. The London and St. Katharine Companies became/
became fused and absorbed the Victoria Dock Company, taking the name of the London and St. Katharine Dock Company, while the docks on the Surrey side combined into the Surrey Commercial Dock Company. The amalgamations were forced by competition which had reduced the dividends of the London Company to 3½% and the St. Katharine Company to 3¾%, and the inception of the Millwall Dock which opened in 1868. This Company was never a financial success as the rates charged to attract business were so low as to make it unremunerative. There was no existing trade which made it a necessity and its only hope of success was the attraction of trade to it from other docks.

This extensive competition threatened the East and West India Dock Company with the loss of a major part of their business. They therefore constructed the South-West India Dock, which was opened for business in 1870 in an unfinished state. This dock was considerably less commodious than those of the rivals who had stolen their business. The apathetic policy of this Company is largely attributed to the composition and procedure of the Board, which numbered forty persons. The Chairman did not remain in office for more than two years, having been deputy Chairman for the two previous years. There was thus little incentive to any member of the Board to apply himself vigorously to the interests of the Company, with the inevitable result that the prosperity of the Company depended on the initiative and ability of the officials, who were inefficient and between whom there was little co-operation.

The Company also experienced a most unfortunate accident. A length of over 1000-feet of quay wall at the East/
East India Import dock sunk between three and five feet, wrecking shed accommodation, cranes, etc. The accident is almost unprecedented in dock history and cost £50,000 to repair. This accident, combined with the desire for further extension and better facilities in order to attract fresh trade, led the Company to construct yet another dock at Tilbury, which also proved a most unfortunate venture.

During the half century subsequent to the amalgamation of all the Surrey Companies in 1864, the history of the system was one of steady progress. The Company specialised in the handling of grain and timber, and the Directors were always members of these trades and devoted themselves wholly to the cultivation of these trades in the docks. By their influence they were able to bring and retain large business to the docks independent of the competition which harassed the other Companies, and by their own knowledge of the requirements of the trades they were able to ensure that the needs of their trades were adequately catered for. The dock system was greatly altered and extended, the Canada dock being added in 1876. By 1893 this Company had to face the question of the increased size of ships, and commenced the construction of a new Greenland dock on the site of the old. Considerable engineering difficulty was encountered in the construction of this dock through running sand etc., and the dock was only opened in 1904, some ten years after its inception.

Forced on by the demand for facilities for larger ships, in 1874 the London and St. Katharine Company extended the Victoria Dock eastwards by the construction/
construction of what is now the Royal Albert dock. This
dock cost about £2,200,000., and was one of the cheapest
docks on the Thames, considering its size and the
accommodation provided. The dock added 16,500-lin.ft.
to the accommodation of the port but although trade was
increasing, it could not absorb the extra accommodation
quickly. The Albert Dock was therefore at first occupied
largely at the expense of the Victoria Dock owned by the
same Company, while it took away from the South-West
India Dock the small amount of steam shipping that had
remained there.

The additional Interest charges thrown upon the
income of the London Company at the same time reduced the
dividend of the Ordinary Shareholders from 3\% to 2\%. The
most serious affect of its construction, however, was
that it led the East and West India Dock Company to build
the Tilbury Dock and was the cause of ultimate financial
misfortune to both Companies.

By 1880 the fortunes of the East and West India
Dock Company had begun to flag and dividends had fallen
from 7\% to 4\%\%. The diminution in the Company's
prosperity was attributable partly to the diversion of
Eastern produce to Mediterranean Ports by the opening of
the Suez Canal, but largely to the fact that the Company
was unable to benefit by the increasing volume of traffic
as its docks were not sufficiently modernised to deal
with the growing size of steamships. The Directors
therefore decided to go in for a new set of docks at
Tilbury. The original estimate for land and works was
£1,100,000., but as the result of misfortune and disputes
with the Contractors, it was found, when the matter was
finally/
finally settled, that the total cost of the dock, including legal expenses, exceeded £2,800,000.

The Directors had assumed that as soon as the dock was opened all the trade handled by the rival Companies would come to it, but between April and August of 1896 the only trade offering was a Line of small German steamers running to Central America once a month, and a few other vessels which were bribed by nominal rates to use the dock.

The promise of a ten years’ agreement at half rates led two large Lines to transfer their business from the Albert dock to Tilbury, but the work of the dock was carried on at a loss.

The London and St. Katharine Company had to reduce their rates in order to retain the rest of their business and they were only able to pay 1½% on their money. The case of the East and West India Company was far worse. The earnings for the year 1887 did not cover the working expenses and the Company would have been unable to meet the mortgages which fell due in March 1888. Three Receivers and Managers were appointed until the financial position of the Company was established in 1893. The quoted price of the capital stock fell from the nominal value of £100 to £9.

Pressure was brought upon both Boards in 1887 to come to an arrangement, either by amalgamation or a working agreement, and after the 1st. January 1889 the two undertakings were worked as one under the London and India Docks Joint Committee, though there was no amalgamation of the capital of the Companies.

The income of the Joint Committee in the early years/
years of the working union was disappointing, but it was successful in maintaining the Companies in a state of solvency until all the London docks were grouped in one undertaking.

Note: An interesting step was the reduction in the number of Directors of each Company. The authorised Board of the London and St. Katharine Company was forty-five and that of the East and West India Company was forty. Under the Committee the joint Directorate of both Boards was considerably reduced, that of the London Company being reduced to fifteen, and the India Company to eighteen. These Boards between them appointed representatives upon the Joint Committee, which comprised sixteen members.

Thames Conservancy: Not only was there complete absence of unity of interest and control in the various docks, but the docks themselves had no interest or control in the river and approach channels to the dock systems, with the exception of a limited area near their entrances. From the very early days, the rights of Conservancy of the river channel had been vested in the City of London, but with the growth of shipping after the introduction of steam, the City proved incapable of carrying out its duties - the regulation of traffic and the maintenance of adequate depths of water. The City was also in dispute with the Crown as to the ownership of the actual river bed and the whole question of ownership was not settled until the passing of the Thames Conservancy Act in 1857, when the position was much clarified. This Act separated the administration of the port from Corporation control by the creation of a Board of twelve Conservators to whom were transferred all the powers, rights and privileges which had been exercised by the Crown and Corporation, even though the ownership of the actual river bed was not clear/
clear in all cases.

The Conservancy functioned fairly well for the first few decades of its existence. The numbers of the Conservators, all of whom received remuneration, were increased to eighteen in 1864, and in 1866 their jurisdiction was enlarged to take in the whole of the Upper Thames, formerly administered by the Upper Navigation Commissioners.

Towards the end of last century the Conservancy found itself faced, like the Dock Companies, with the problem of providing increased depth of water for shipping, and, in spite of considerable agitation upon the part of the shipowners, they proved either unable or unwilling to undertake the large amount of expenditure which would be involved.

A measure for the reform of the Conservancy was made in the Act of 1894 which consolidated and amended the powers of the previous constitution. The numbers of the Conservators were increased to thirty-eight, representing a very wide number of bodies, and the sum of £3,100 was set apart for their remuneration. The most important practical section of the new Act was that which recommended the Conservators to proceed with the carrying out of dredging to deepen and widen the river bed as early as possible. The Conservators, however, took no steps to carry out this mandate as they felt convinced that they would not receive Government assistance for the measure, and did not consider it worth while to incur the necessary expense to apply to the Government for assistance.

Sanitary/
Sanitary Authority: In 1872 the Corporation of London recovered status in the port by being constituted the Sanitary Authority for the port under the Public Health Act passed in that year. The duties comprised the safeguarding of London from risk of infection and disease brought either by persons or goods from the river, and they carried out these duties in a most praise-worthy manner. Their jurisdiction, however, only applied at that time to such portions of the docks as were within their area, the Metropolitan Burgh Councils being responsible for this work within their own boundaries, while other sections of the port came under the respective Urban District Councils.

Formation of the Port of London Authority: Thus as late as 1900, although almost every other port in Great Britain was under the control of one competent Authority, in London the control was in the hands of diverse numbers of bodies, namely, the competing Dock Companies, the private owners of wharves, the Thames Conservancy, the Trinity House, and the City of London.

Of these the Dock Companies were generally in a bad financial position, nor had the Thames Conservancy provided an adequate depth of water in the approaches to the port. In 1899 the London and India Docks deposited a Bill in Parliament to give them powers to make additional charges. The Bill was rejected by the Government, who, however, announced that the Port of London was of such importance from a National point of view that it ought to be inquired into and a Royal Commission was appointed to consider its administration. This Commission was appointed on the 21st. of June 1900 and sat for two years, during the course/
course of which evidence was heard from all interested parties. The evidence largely resolved itself in a series of attacks upon the existing order of things and the defence of those responsible for the administration of the port. Only the City Corporation, the London County Council, the London Chamber of Commerce, and the London and India Docks Company put forward creative schemes for future management; the rest of the criticism was negative.

The City Corporation proposed the municipalisation of the port with capital to be provided by the Council upon the security of the rates, although they proposed that all the principal Authorities and the Dock Companies should be represented upon the Authority. The London Chamber of Commerce brought forward proposals for the formation of a Trust with financial guarantee provided by the London County Council. Trinity House had no attacks to meet and confined itself to drawing attention to anomalies in connection with the pilotage law. None of the section of shipowners giving evidence had any detailed scheme to offer for the future management of the port and they merely confined themselves to broad principles which agreed the necessity of a Central Authority to take over the general administration of the port and to extend, improve and add to its facilities. They were, however, strongly averse to the purchase of the docks or to any financial assistance being given to them. The London and India Docks Company, which by then owned 80% of the accommodation worked by the Dock Companies, provided the most valuable evidence from this source.

The Royal Commissioners in their Report did not support any of the schemes which had been suggested in evidence/
evidence in the course of their enquiry. They expressed their opinion in blunt terms, and stated that the Thames Conservancy had an inadequate view of their duties, although Trinity House was to be commended.

With regard to the Dock Companies, the Commissioners' comment was that although the misfortunes of some of the Companies were due, to some extent, to rash and premature expenditure of capital and the errors in administration, the Commissioners felt that they were the victims of a change of circumstances which had gradually dispossessed them of the advantages which they had once enjoyed. In spite of the great service which they had rendered to the community, however, powers could not be given to them to tax their rivals in trade in order to restore their fallen fortunes.

The Commissioners recommended the creation of a Port Authority on the Thames. They felt that the Port of London was in danger of losing part of its existing trade; that the Thames Conservancy did not possess sufficient revenue from existing sources to enable them to fulfil their obvious duty, nor did they attempt to procure the necessary powers. Trinity House was to be entrusted with the buoying and lighting of the channels, and the Commissioners' finding proved by evidence that the distribution of power between distinct Authorities was contrary to the interests of the port as a whole. They considered that the docks were as essential to the working of the port as the river itself, and found that they should no longer remain independent. They further recommended the formation of an Authority to which all the powers of the Thames Conservancy, Trinity House, Watermen's/
Watermens Company, etc., and the powers and property of the London and India, Surrey Commercial, and Millwall Dock Companies should be vested, the limits of the port being from Teddington lock, the then tidal limit, to the Island of Sheppey in Kent. Detailed suggestions were made as to the manner in which these undertakings could be acquired and disputes settled, and proposals for maximum rates and charges were also made. The Committee saw no reason for placing any charge of the expenses upon the National Exchequer, but proposed that the whole cost should be provided for by the creation of Port Stock, guaranteed if necessary by the London County Council. They gave careful consideration to the constitution of the Authority and suggested that it be comprised of forty members of whom twenty-six would be nominated to represent the London County Council and other official bodies, the remainder being elected by representatives of the commercial interests.

In the following year, 1903, a Bill was brought in which generally proposed to carry out the recommendations of the Committee. The Bill, however, was forced through the Parliamentary Committee against time and was finally dropped owing to universal opposition.

It was not until 1906 that the question received further close Governmental consideration, which led up to the passage of the Act, which became Law as the Port of London Act 1908.

The Authority was established for the purpose of administering, preserving and improving the Port of London. Its limits extended from Teddington to the Isle of Sheppey, and included all islands, streams, creeks, channels, harbours, docks and places within those limits, with/
with the exception of the rivers Medway, Swale, Lea, and the Grand Junction Canal. The Authority was to be composed of twenty-eight members, eighteen of whom were to be elected and ten appointed, all chosen to represent the official and commercial interests with the proviso that two of the appointed members must represent organised labour. The duty was placed upon the Authority to carry out all works in connection with the port within its area, carried out by the Dock Companies or the Public Authorities, with the exception that the powers of the Sanitary Authority were retained by the City of London, and Trinity House was permitted to continue to exercise its functions independently. The Authority was given power to purchase all the undertakings of the Dock Companies and to acquire land compulsorily for the purpose of the port. The rights, powers and duties of the Thames Conservancy below Teddington were transferred to the Authority, together with the lower navigation fund and all their assets and liabilities. The Authority was given power to regulate registration and licensing of craft and boats, and the licensing and government of lightermen, and the charging of port rates on all goods and vessels entering their limits, subject to fixed maximums. Preferential rates on goods and shipping were forbidden, although differential rates were permitted for special circumstances. The order in which the receipts on the revenue account were to be applied after the payment of working expenses, was laid down, while an annual estimate of receipts and expenditure had to be submitted to the Board of Trade, who have power to call upon the Authority to levy increased or additional dues.
if it is satisfied that there may be an excess of expenditure over receipts, and they also appoint an Auditor to audit the annual accounts of the Authority. The Board of Trade are referred to in thirty-four of the sixty-three sections of the Act as the Government controlling department.

It might appear from the prominence of the mention of the Board of Trade in the Act that the grip of the Government upon the Authority is very strong, but this is not the case. The measure of Government control imposed in practice has been confined to the requirement that the Port of London Authority have to make an annual report to the Government. The Board of the Port Authority have enjoyed an independence to carry out their own policies, and a freedom from interference quite at variance to what might be anticipated from the written word.

The Port of London Authority: Owing to the absence of any electorate, the first elected members of the Authority were selected by the Board of Trade in consultation with various interests, the composition being as follows:-

**Appointed Members.**

By the Admiralty ... ... One.
By the Board of Trade. ... Two.
By the London County Council ... Four.
By the Corporation of London ... Two.
By the Trinity House ... One.

**Elected Members.**

By the payers of rates, wharfingers, and owners of river craft ... Eighteen.
The Board of Trade also appointed Sir Hudson Kearley, later Lord Devenport, as first Chairman of the Port Authority, with Mr. Sydney Bates, one of the Directors of the London and India Docks Company, as an additional "person of experience in Port Management."

The total numbers of the Authority on its establishment were therefore thirty, and of these, seven had been members of the Thames Conservancy. The office of Chairman of the Authority carried with it a salary of £4000 per annum, but it was decided that in spite of authorisation to the contrary in the Act, no salary should be paid to the Vice-Chairman or Chairman of any Committee other than the Dock and Warehouse Committee. The first Chairman did not accept the salary to which he was entitled. The work of the management was allocated amongst the following Committees:-

Works and Improvements Committee.
Dock and Warehouse Committee.
River Committee.
Finance Committee.
Staff and Stores Committee.
Parliamentary Committee.

Later, the Works and Improvements Committee was dissolved. Stores became the subject of a separate Committee and a General Purposes Committee was appointed to deal with large works and improvements and broad questions of policy affecting the undertaking as a whole. In addition to the two members of the Authority who were thus required to give almost full-time service to the Authority, the necessary staff for the detailed administration had to be agreed, the staff being recruited partly from the Officers of the undertakings which were taken/
taken over by the Authority and partly from outside.

Detailed programmes of reconstruction and new works involving an expenditure of about £14,000,000 were drawn up and work commenced upon the first section, which work of improvement and addition has been progressively maintained ever since the formation of the Authority, with the exception of interruption necessitated by the Great War.

The functioning of the Authority has proved a complete success and in spite of its enormous size as an undertaking and its quasi-Government status through the interest of the Board of Trade in its management, it has carried out its duties with great efficiency. The members of the Board of the Authority in particular show a very keen appreciation of their duties and responsibilities, as is shown by the remarkably high percentage of attendance at meetings - 80.4%. It is significant that in spite of the continuous agitation for administration reform of one sort and another which characterised the history of the Port of London during the twenty years prior to the formation of the Authority, and the varying views which were expressed in Parliament and elsewhere as to the workability and efficiency of the scheme, no significant changes were made under the Port of London Consolidation Act 1920, and the Authority is now upheld as a classic example of an efficient method of administration of a public utility conducted upon the basis of the needs of the community which it serves. Up to the 31st. March 1937 just under £15,000,000 had been spent by the Authority on capital expenditure upon new works out of a total capital expenditure of £40,500,000, which represents the total capital/
capital expenditure of the undertaking, including the cost of the acquisition or transfer of the constituent undertakings and the acquisition of lands, etc.

The routine management again follows the same lines as those of other ports. As originally arranged the Chief Engineer and the General Manager were given equal status under the Authority. Later, the General Manager was constituted the senior official, having under him a Chief Engineer whose duties mainly comprised maintenance work. For some time the services of Consulting Engineers who were not in the full-time employment of the Port of London Authority, were engaged for the execution of new works, but at the present time such works are again in the hands of the Chief Engineer.

In the post-war period, 1919/36, the total Net Registered Tonnage of vessels has risen from 26,000,000-tons to 62,000,000-tons, compared with 40,000,000-tons which can be taken as the average figure of the pre-war years.
A complete change was made in the system of administration of ports in Canada in the year 1936 with the passage of the Act respecting the National Harbours Board in June of that year, whereby a National Central Board was set up to supervise all the Canadian Harbours as one unit.

Prior to that date the Canadian Harbours had all existed as separate entities, the more important being administered by Harbour Commissions largely following the American plan, although some were administered by the Department of Marine. In these latter the only charges made were the harbour fees which were so small that the ports were considered as being exempt of all charges.

The Commission harbours therefore suffered severely in competition with these harbours, many of which had been built by the Government at the request of private enterprise in view of its dissatisfaction with the facilities provided by a nearby Commission harbour. The competition between the Port of Sorel and the Port of Montreal, more particularly in connection with the shipment of grain, is a case in point, Sorel having been constructed at the instigation of influential shipping interests handling both the river and ocean grain trade, as the Montreal Harbour Commission had decided that it was contrary to the declared policy of the Port of Montreal to allow a grain elevator to be privately operated within its boundaries.

There were fourteen Harbour Commissions, fairly similar in constitution, which generally followed the American/
American pattern but varied in personnel and powers. Montreal, Quebec, Vancouver, Halifax, St. John, Three Rivers, and Chicoutimi were Federal appointed Commissions possessing three Commissioners appointed by Government to hold office during pleasure. The other seven were wholly or partially Municipally appointed Commissions, of which Winnipeg and Toronto had five Commissioners and the others three. There was no clear dividing line between the class of port operated by a Commission and the more important ports operated under Harbour Masters by the Department of Marine, some of the latter handling larger volumes of traffic than ports under Commissions. The principal Harbour Commissions followed the form adopted for Montreal in 1907. After trying many forms of Commission with up to as many as eleven members, Montreal became stabilised with three in that year, having returned to the original system established in 1830.

The system had very serious weaknesses. The appointees (Harbour Commissioners) were practically Political Agents under the Government and their principal qualifications were that they were Politicians first and Politicians all the time, rather than that they possessed such qualifications as the ordinary business man would require if he were selecting men for specialised work. To quote Sir Alexander Gibb in his Report upon the Canadian Harbours 1932 - "the Commissions are clearly and perhaps inevitably looked on as official organisations for the control of important patronage." It was the almost invariable practice for them to change personnel completely with any change of Government. Holding office thus for an indefinite and possibly short period, the Commissioners hurried/
hurried the carrying out of important new works and frequently condemned whole-sale the plans and proposals of their predecessors whose policy, prior to taking office, they had naturally opposed.

The Commissioners assumed practically full executive control with the result that the permanent staff was dispossessed and atrophied. They took over the duties of General Manager, Chief Engineer, and the detailed administration in addition to their proper function of deciding questions of policy and higher administration and were guilty of filling subordinate positions in accordance with the wishes of the local Party patronage office. The purchase of supplies and stores was generally in the hands of one of the Commissioners and he settled all contracts, a system open to grave abuses. Up till the time when Sir Alexander Gibb made his Report, the process of political interference had become much accentuated and in his view the Commissioners were carrying out work which an efficient permanent staff would be better qualified to undertake.

In like manner the financial procedure in connection with the independent Harbour Commissions was open to serious criticism. Following upon the political nature of the organisation, the Commissioners were more eager to obtain grants of Government money for the benefit of their Town and their personal reputations in the Town than to conserve the resources of the Country as a whole or to restrict capital expenditure to the actual needs of the trade. All the engineering work was carried out by their local staffs without consultation with other persons and much of this work was ill-designed and inefficient.

Some/
Some of the Harbours retained full-time constructional staffs even when no constructional work was being carried out and the whole of the harbour staffs were over-manned in all departments. Another weakness of the system was the almost invariable practice of charging as much repair and reconstruction work as possible against capital account. To such a marked extent had this been done that it was found impossible to ascertain the true position of affairs as far as the probable actual routine expenditure on working and maintenance was concerned.

To overcome the weaknesses of the system, Sir Alexander Gibb proposed the creation of a National Harbours Board composed of three Commissioners who would be appointed for their competency, to hold office for a period of ten years and to be outside political control or interference. They were to be whole-time and highly salaried, the duties of the Chairman being to deal generally with policy and more specifically with finance, the other two Commissioners to act as Director of Harbour Engineering for all the National Ports, and as a Director of Port Operation respectively. All the National harbours were to be dissociated from their existing system of administration, ownership and control, and placed under the direct control of this Board, which was to have its headquarters in Ottawa. In the ports themselves the existing Commissions were to be dissolved and the ports placed under the control of a Port Manager assisted by an Advisory Committee of representatives of the Provincial Government, Municipalities, Board of Trade, Railways, Shipping, representatives of Trade, Commerce, etc., and Dock Labour.

Although/
Although the Report was dated 15th. January 1932, no effect was given to it until 1936, when "an Act respecting the National Harbours Board I Edward VIII Chapter (42) 23rd. June 1936" was passed, setting up the National Central Board of three members to supervise all the Canadian Harbours as one unit upon the lines laid down in the Report. The chief suggestion which has not been carried out is that the Advisory Committees, though suggested, have not yet come into existence. The change over from the previous system to the new one was occasioned without much friction, the new Port Managers all having been permanent officials under the Commission regime.

The general direction of all planning and control is centralised at Ottawa, while the operation and maintenance of each port is considered as essentially a matter for local management. The final powers and decisions in local matters now rest with the Port Manager who is a Government servant coming under the Department of Transport.

The new system has, however, been in operation for too short a time for statistics to be available from which definite conclusions as to the efficiency of the new regime can be drawn. The Accounts for one calendar year have, however, been published, giving a consolidated balance sheet of all the harbours, and it appears that the preliminary difficulties of accounting and finance have been overcome and the whole system of Port Administration established upon a firm basis.

AUSTRALIA/
In Australia, as in Canada, there is evidence of a tendency towards unification of control. On the 1st. February 1936 the Maritime Services Board of New South Wales, brought into existence by the Maritime Services Act 1936, came into existence. The Board was constituted on the lines recommended by the Maritime Services Co-ordination Board in its Report of 27th. October 1935, and the formation of this Board was the first of the proposals which it made with the object of improving Port Administration in New South Wales.

The principal changes resulting from the passage of the Act were :-

(1) The vesting in one body of the control and management of all the ports of New South Wales, with the exception of Port Kembla, and the exercise by the same body of the general powers of a navigation, pilotage, and conservancy authority with jurisdiction over all navigable waters in the State.

(2) The recognition by the Government of the principle of granting representation on the controlling body to shipping and mercantile interests concerned in the provision and administration of the port facilities.

(3) The creation of a statutory Advisory Committee for the Port of Newcastle, comprising representatives of local business interests, with an independent Chairman.

This new Board was formed in order to unite the functions of the Sydney Harbour Trust with many of those carried out by the Navigation Department of the Department of Public Works, with the avoidance of overlapping of function and simplicity and economy of administration. The combined body has also certain limited powers over all the other harbours, including Newcastle, for which an Advisory Committee has been constituted. The position of/
of the Board is, however, transitional, and it has been functioning for too short a time for any opinion on its efficiency to be formed. It is, however, another point of value to note that the need for co-ordination has been felt in Australia and that action has been taken with this object in view. The Board is composed of a President, Vice-President, and three Commissioners who are served by the usual routine staff, while the Advisory Committee of the port of Newcastle is composed of five members, one of whom is the Engineer-in-Chief at Sydney.

NEW ZEALAND.

The harbours of New Zealand provide a further example of Trusts constituted on the British pattern. The Harbours Act 1923 of New Zealand consolidated and amended the existing enactments of the General Assembly relating to harbours, and laid down a plan for the constitution of all Harbour Boards, together with the method of their incorporation and the appointment and election of members of the Board, together with its powers and duties. These are generally similar to those given to the Port Trusts in Great Britain, and are clearly defined, covering all matters with regard to all contracts, rates, the borrowing of monies and their disposal, and the construction of works. The Boards also had their powers to make bye-laws standardised, and their control of pilotage confirmed. The Act and its provisions apply clearly to all harbours, making the procedure etc. standardised, although the harbours have power to charge such individual rates as they may think fit as in Great Britain/
WELLINGTON HARBOUR BOARD, N.Z.

14 MEMBERS

Representing City and Borough Councils and Surrounding Counties, etc. (Principal Authorities only named)

Erectors of Masterton etc. 2
  " " Wellington 4
  " " Petone 2
  " " Palmerston 2
  Total 10

Representing Commercial Interests

Payers of British Shipping Dues 2
  " other dues than Shipping 3
  Total 5

Appointed by Governor General 1

Total = 14

GENERAL MANAGER AND SECRETARY

Accountant and Cashier
Engineer
Harbour Master and Chief Pilot
Traffic Manager
Consulting Engineer
Commissioners of Sinking Funds
Solicitors and Legal

Treasurer and Assistant Secretary
Britain, and the constitution of the Boards and the number of their members varies. Thus, Auckland has fifteen members, and Wellington fourteen members, while some of the smaller harbours have as few as five members, but the representation upon each Board was confirmed or laid down in the Act.

The powers given to the harbours are generally similar to those given to the Port Trusts in Great Britain, the services of the ordinary members being gratuitous. The Chairman may, however, receive an annual allowance not exceeding £200., while the ordinary members may receive allowances in respect of travelling expenses.

All dues levied must be applied to some "Shipping Purpose" although the Boards have power to create special funds to provide for certain contingencies, such as depreciation or destruction of the property of the Board, claims made upon the Board, or any exceptional loss or expenditure.

**INDIA.**

In India the ports are divided into two categories, major and minor. The distinction is one of administration, not trade, for the major ports are those which are supervised by the Government of India, while all other ports are described as minor and are supervised by the Provincial Governments. It is thus quite possible for a major port to be of less importance than a minor one, the chief example for a time being Vizagapatam, for which a new harbour has recently been constructed in view of/
of possibilities of trade development. At the present time, however, the major ports include all ports in which facilities in any extensive scale have been provided for the discharging of ocean-going vessels. These ports are Karachi, Bombay, Madras, Calcutta and Chittagong.

The ports of Karachi, Bombay, Madras and Calcutta are administered by Port Trusts, which bear a strong resemblance to those in existence in Great Britain with the exception that Government nominees feature upon the Boards in somewhat larger numbers, while in many of the harbours, and also Rangoon in Burma, the offices of Chairman of the Board and General Manager are merged in one, the highly qualified and salaried official acting as Chairman instead of a person elected by the Board members as in Great Britain. The control at Chittagong is along the lines adopted at Southampton. The Chittagong Port Trust corresponds to the Southampton Harbour Board and is only responsible for the approach channel and other external features constituting the harbour section of the port. Jetties, plant, sheds, etc., have been provided and are managed by the Assam Bengal Railway in the same way as the trade of Southampton is handled by the Southern Railway.

Cochin and Vizagapatam are worked under Administrative Officers who are directly under the control of the Government of India. It is probable, however, that Port Trusts will be formed for these two harbours as soon as the trade has developed sufficiently and there are men of the right calibre to take over the duties of Trustees.

The Boards are all of medium size - Bombay 22, Calcutta/
Calcutta 20, Madras 15, Karachi 14, Rangoon in Burma 17.

Calcutta Port Trust was founded in 1870 and the Bombay Trust three years later, while Karachi and Madras Port Trusts were formed in 1886. These Trusts all took over the liability for the usual expenditure on port works, which were previously incurred by the Government out of loans.

Although the principle of autonomous administration of ports is now accepted in India, they are far from independent of Governmental control. There is the influence of Government appointed members upon the Board and the official position of the Chairman, while, until recently, the work of each Port Trust was supervised by its Provincial Government. Under the Reformed Constitution they have all come under the direct supervision of the Government of India since 1st. April 1937.

It is interesting to note that Sir Thomas Elderton, Chairman of the Calcutta Port Trust, in a recent paper published in the Financial Times India Supplement, has referred to "the need in India for better co-ordination between the various branches of transport, and that there is now much wasteful competition. Linking of all ports with the Government of India should facilitate co-ordination, but it remains to be seen whether any practical benefit will be obtained."
Rangoon
Quasi-Government Department

The Commissioners for the Port of Rangoon: 17 members

4 Appointed by Government
The Chairman (Bar-at-law and MLC)
Principal Officer Mercantile Marine Dept., Rangoon
Head of P&D and B&I representing Ocean-going vessels.
" " Irrawaddy Fishilla Co. " Inland Waters vessels.

3 Ex officio,
Agent Burma Railways
Chairman Rangoon Develop't Trust.
Collector of Customs.

5 Elected Europeans
Burma Chamber of Commerce 4
Rangoon Trades Ass. 1

5 Elected Non-Europeans
Rangoon Municipal Council 1
Burma Chamber of Commerce 1
Chinese 1
Indian 2

The Chairman, (salaried and full time)

Secretary
Chief Engineer
Drawing Office
Works
Projects
Mechanical

Traffic Manager
Sea-going Traffic
River-borne Traffic
Warehouses
Commissioners Estates

Chief Accountant

Deputy Conservator
Pilots
Harbour Masters
Wireless, Lights
Port Survey
Registration
Signal Station

Port Health Officer
International Port
Regulation
Sanitation
FRANCE.

France is the most important Maritime Country which has a system of State administered harbours. With the exception of the ports of Le Havre and Bordeaux, all the ports in France are directly administered by the State; the two large ports just mentioned have a certain measure of local autonomy.

In considering the system of administration in France and comparing it with the systems in force in other Countries, the important part which Government management plays in French affairs must be borne in mind, particularly when comparisons are made with the English-speaking Countries where most public utility organisations are in the hands of Companies, Private Owners, or Municipalities.

In France the power of Local Authorities is extremely limited. Most of the functions which elsewhere are carried out by Local Authorities are exercised by the State, owing to the relatively weak financial powers which can be delegated to local bodies by Law.

The Government controls, and has for long controlled, nearly all such of the Nation's activities directly by administration by State Department on the military system. Thus all roads, highways, bridges and allied public works are carried out under the authority and direct administration of the Minister of Public Works through the Department of "Ponts et Chaussees" (Bridges and Highways). This principle has been the basis of the administrative regime of the French ports since the time of the French Revolution. The role of the officials of the administration of the Ponts et Chaussees was then defined/
defined by numerous texts, of which the most important is the Law of 29 Floreal An X. The guiding principle upon which the police regulations of harbours is based is even more ancient, as it is derived from the Ordonnance Sur La Marine of 1681, and Article 538 of the Civil Code.

When comparing the system in France with other systems, it is thus particularly important to take into account the special characteristics of the French Nation and their methods of Civil and Administrative Legislation. Nevertheless, since 1919 the administration of the ports has been considerably modified.

The ports are divided into two distinct groups, the Ports Maritimes or Ordinary Commercial Ports, and the Autonomous Ports.

The French Commercial Ports comprise all ports except those which are specially defined as Autonomous and the Naval Harbours. The State supervises the construction, maintenance and working of quay and foundation works, and the carrying out of dredging, the removal of wrecks, soundings, etc., the allocation and collection of dues etc. on steamers and goods, and the drawing up of regulations of a general nature. Regional Chambers of Commerce, however, usually have to attend directly to the management, maintenance, working, and improvements of handling appliances, and the representation of users when dealing with the Public Services. They can only express opinions on matters concerning general programmes where capital expenditure is involved or dues have to be collected.

The actual handling of goods in ports is generally/
NANTES (Commercial Port)

The Chamber of Commerce
(for management of plant and other services only)

The Port Director

The Ministry of Public Works

The Minister of Public Works

The General Inspector of Roads and Bridges Dept.
(for all other matters)

Consultative Committee: 9 Members

5 Members from Chamber of Commerce
1 Member " Municipal Council
1 " " County Council
2 Members " Principal Uses of the Port

NOTE: All above members are appointed by decree by the Government Officials.
generally done by private Firms, as is common in most harbours throughout the World. Conditions of the work are generally agreed upon between Workers' Unions and Employers' Federations, although, as is natural in France, under the Superior Authority of the State.

In some cases concessions are given to individual Firms for the working of a part of the Port with its entire equipment of dry-docks or special undertakings. The weighing and classification of goods is sometimes carried out by the Town, sometimes by the Chamber of Commerce, and sometimes by private parties.

The expenses of harbour construction and maintenance form part of the National Budget. The result is that there are no individual accounts for the total cost of construction of any special port, and no account of the sums invested by the State in their construction has ever been made. In spite of this uniformity of accounting there is no uniformity of charges such as exists in the British railway rates classification. The problems of the individual ports are too varied to admit of it even if it were considered desirable.

"Commercial Ports:" The general organisation of "Commercial" ports is laid down by the decree of 7th. April 1924, supplemented by Ministerial Orders in 1926 and 1930. These texts define the duties of the services coming under the Ministry of Public Works, which controls the greater part of the operations carried on in the ports. All the services concerning the construction, maintenance, and exploitation of a port of this type and its accesses are performed by the Government through the Ponts et Chaussees (Roads and Bridges) and the Port Officers.
According to the decree of 17th April 1924, in non-autonomous ports all the services coming under the Ministry of Public Works were placed under the authority of a Director, who is directly responsible to the Minister and who is selected from amongst the Chief Engineers of the Ponts et Chaussees and appointed by decree, and to him is delegated much of the authority nominally exercised by the Ministry, as he is the principal voice of the Government in his particular sphere.

The Director is assisted by a Consultative Committee whose duty is to look after the local interests of the users of the port. The Director keeps in contact not only with the Consultative Committee but also with the Chamber of Commerce of the port, and has under his orders a Chief Service Official who is an Engineer of the Ponts et Chaussees and who may also be placed in charge of works.

The Chief Service Official controls the concessions for equipment and all the connected services of the port. He is in permanent touch with the customers of the port and has under his authority the Port Officers who attend to the routine and movements of vessels in the port.

The Consultative Committee assists the Director and the constitution of this Committee is the same for every port, although one Committee may represent the interests of a group of minor ports, or certain minor ports may be affiliated to the principal port in the district.

The Committee comprises five members taken from
the Chamber of Commerce, one member from the Municipal Council situated in the principal vicinity of the port, one member from the General Council of the Department (County), and two members from amongst the principal users of the port; nine in all. Ports of exceptional importance may have the number of members of its Consultative Committee increased to twenty-one. The services of the members are given free. The Consultative Committee (in which the Director of the port has a consultative voice) must be consulted on all matters concerning the port, including any proposed dues.

In small ports the Chief Engineer of the Ponts et Chaussees carries out the duties of the Director, with or without the assistance of a Consultative Committee of nine members at the most.

The method of appointing the members of the Consultative Committee is important, as the majority of them are appointed by decree by the Minister of Public Works or his Representative, and are chosen from lists of possible candidates which are provided by the Chambers of Commerce and similar bodies. The lists drawn up by these bodies contain a number of names double those of the seats which have to be filled. These members are usually nominated each year before the 1st. of January by the Prefet.

The Director of the port and his representatives have the right to attend in the deliberations of the Consultative Committee and to give advice, and statutory records of the findings of the Committees have to be forwarded to the Prefet, together with the Director's comments thereon.

Management:
Management: The routine management of the port and the operation of the plant is placed in the hands of the local Chamber of Commerce. The Chambers of Commerce in France are not voluntary advisory bodies as in Great Britain, but have a definite position in the business life of the Town, and carry out many of the functions which, in Great Britain, are exercised by the Municipality. Their members are elected on a restricted franchise system, to represent the wholesale and retail trades, manufacturing concerns, shipping interests, etc. In accordance with the terms of the French Laws, the Chambers of Commerce have two primary duties, (1) to give advice to the Government on all questions concerning Industry and Commerce, and (2) to ensure the carrying out of works and to administer certain services which are entrusted to them. Under this second heading the Chambers of Commerce have been given the control of the management of the services of the public plant in the Commercial ports. They, in turn, entrust the routine management to the Port Director or Engineer-in-Chief who thus controls the whole port, both from the constructional and administrative side, and from the operative and managerial side as well. He is, however, subject to a dual system of control. Actually both the State and the Chamber of Commerce contribute directly to his salary and he is answerable to both in their respective provinces. Thus he acts as Manager of the Chamber of Commerce upon all questions of working and routine management, and merely in an advisory capacity as a representative of the Government. On the other hand, on all questions of capital expenditure or change of dues or charges, he is in sole control, receiving, in turn, the/
the advice of the Chamber of Commerce through the medium of the Port Consultative Committee.

**Autonomous Ports:** An autonomous port, according to the fundamental Law of 12th. June 1920 and the Public Administration Regulations of 23rd. September 1921, is a dual organisation placed under the control of the Government. It is in effect administered by an Administrative Council and by a Director who each have special powers but keep in close touch.

The Administrative Council of the autonomous ports of Le Havre and Bordeaux comprise twenty-one members, as shown on the diagram, these members being composed of -

Nine members appointed directly by the Chamber of Commerce.

Nine members appointed by Governmental Decree, three of which represent the district Chambers of Commerce.

One member from the General Council, one from the Municipal Council, and one workman from the port named, he being appointed by decree and put forward by the Workers' Unions.

Amongst the nine members appointed by decree, the six who are not from the district Chambers of Commerce are appointed after unofficial consultation with the Chamber of Commerce of the principal port, at any rate for the members who are not officials.

The members of the Administrative Council, like those of the Consultative Committees, are unpaid, although they are entitled to expenses incurred in carrying out their duties. They are nominated or appointed for a period of six years and are eligible for re-appointment. One-third of their number have to be re-appointed every two years during the month of December.
The original order in which the members have to retire and be re-elected is settled by lot. The Council nominates a President and Vice-President who are chosen from its members. The Director is chosen from a list of three candidates drawn up by the Council of Administration, and he is appointed by decree on the recommendation of the Ministry of Public Works. He can only be relieved of his position by Ministerial decree after consultation with or upon the recommendation of the Administrative Council. His remuneration is fixed by the Council and is included in the port expenses, but he must be chosen from among the members of the staff of the Ponts et Chaussées.

The position of President of the Administrative Council or of Director cannot be occupied by a person holding the appointment of Senator or Deputy, while financial interest acts as a bar to membership in certain cases.

The Administrative Council has final authority concerning everything relating to equipment and the running of the port, with the exception of new works which require financial aid from the Government. The Council authorises concessions for plant and fixes the maximum charges. All quay dues which are elsewhere levied by the State, such as dues for using public plant and receipts arising from public property, are at its disposal. On the other hand, the financing of its share of the cost of new quay and foundation works (usually one-half), is covered by local rates and dues and by subsidies from other incorporated bodies in the district.

The deliberations of the Council relative to the/
the objects, on which the Council is nominally the final authority, can be over-ruled by the Minister of Public Works within eight days of the submission to him of the process-verbal of the findings for his consideration and possible approval. The deliberations become binding either by a Report that the Minister approves or by the expiry, without opposition, of the statutory eight days after the proposals have been sent to the Minister. There are other regulations governing the procedure when the Council and the Minister are at variance. However, the deliberations of the Administrative Council only become binding when they are sanctioned by the Government, when they apply to projects which entail alterations or essential modifications in the works or approaches of the port, or which require the financial assistance of the Government. As few matters of importance fail to be included under this somewhat comprehensive definition, it is clear that the Government still maintains its hold upon the so-called Autonomous Ports, except for points of minor detail.

The Director is placed side by side with the Administrative Council, with special powers which are set out in the diagram. He is, at the same time, the Executive Agent of the Administrative Council. The necessary co-ordination between the Government and the Local Authority is carried out through his serving both parties.

As in non-autonomous ports, the Director has at his disposal all the personnel of the port, as shown in the organisation diagram. This personnel is not very different from that of non-autonomous ports.
Bordeaux (Port Autonome)

Administrative Council

- Committees: Administration, Finance, Equipment, etc.
- Management Committees

President

The General Secretary

- Book-keeping and Records

Port Service

- Harbour Master
- Maintenance

The Port Director

- Equipment and Workshops
- Commercial Affairs
- Traffic
- Statistics
- New Works
- Accesses Dredging, Lighting and Buoying

The administrative council: 21 members

- 9 members appointed by Ministerial Decree:
  - 3 by members of Chambers of Commerce in district
  - 1 by Privy Council
  - 1 by Minister of Finance
  - 1 by Minister of Public Works
  - 1 by Railways
  - 2 by users of the port

- 3 Members of Various Origins:
  - Bordeaux Municipal Council
  - Gironde General Council
  - Workers Unions

- 9 Members appointed by Bordeaux Chamber of Commerce:
  - 4 Members of Chamber of Commerce of Bordeaux
  - 5 Users of the Port
LOCAL PUBLIC SERVICES

- Mercantile Marine
- The Navy
- Inland Navigation
- Maritime Recruiting Office
- Inspector of Navigation
- Pilot Service
- Customs
- Public Works
- Railways
- Postal and Telegraphic Service
- Landed Property
- Emigration
- Naval Sanitary Authorities
- Harbour Police
- Inspection of Work
- Army Engineers
- Departmental Administration
- Municipal Administration
- Public Establishments.

BORDEAUX — THE FOUR DUTIES OF THE DIRECTOR

THE DUTIES OF THE DIRECTOR.

1. Official of Central Authority
2. Engineer-in-chief of the Port
3. Executive Agent of Administrative Council
4. Chief Engineer of Maritime Service

Directions and Instructions from Central Authority.
Administrative Measures: Maintenance, Exploitation, Improvements.
At Bordeaux the Director is also the Chief Engineer entrusted with port works. At Havre, on the contrary, the Director is assisted by another official who fulfils the functions of Chief Engineer. The Director is Chief of Personnel in the port. As representative of the Government he exercises, within the limits of the circumscription of the port, an effective control of all the public services for running the port. He corresponds direct with Ministers and frequently calls together the users of the port to conferences for co-ordinating action.

The Director is, at the same time, the direct representative of the Ministry of Public Works for the management of small ports not comprised in the circumscription of the Autonomous Port, and for that of the local lighthouse service (a Government service).

All the operations of an Autonomous Port are controlled by an Inspector General of the Ponts et Chaussées acting under the authority of the Minister of Public Works. The deliberations of the Administrative Council are submitted for the approval of the latter in all matters coming under the Government.

Thus, in an Autonomous Port, the Chamber of Commerce, the Consultative Committee, and, for everything concerning improvements, the Government itself, are all condensed in the Administrative Council.

This Assembly is not exclusively local; it is more specially maritime than a Chamber of Commerce. It comprises, in addition, a representative of the workmen's staff, as also a representative of the Railway Companies.

Experience has proved that this somewhat unusual system has worked in quite satisfactory conditions but there/
there is little doubt that this is due to the presence of men of remarkable calibre in the important positions in the ports in which the installation of autonomy has been tried.

The system of autonomy seems to have been suggested only for the large and a few medium sized ports, principally owing to the relatively weak financial powers which can be delegated to local bodies.

Financing of Construcional Works: It is necessary to distinguish infrastructural works, i.e., quays, jetties, dredging, reclamation and forms of repair of the foregoing, and those of the superstructure, i.e., cranes, handling plant, railways, and sheds.

In the former, one-half of the prime cost is paid by the Government and one-half by the Chamber of Commerce, although occasionally the Town itself may contribute this portion. For the less important ports, the Government bears a portion of the annual share of the Local Authorities and pays for two-thirds or even three-quarters of the expense. In the latter, the capital cost of all works is borne completely by the Local Authorities. The Chambers of Commerce pay for cranes, sheds, and handling plant, while the Railway Companies pay for track, in accordance with the terms of their concessions. The Chambers of Commerce, or in exceptional circumstances the Towns, are authorised to collect Tonnage Dues on vessels, Rates on the merchandise unloaded or loaded, and also on passengers, in order to furnish the portions of the expense which they have to contribute. As a general rule these cover the cost of the loans raised by the Local Authorities for the development of the port, and are over and above those/
those levied by the Government. The collection of all the port dues is in the hands of the Customs Authorities who add the requisite proportion of the port charges on goods and vessels to the National Tariffs, and remit the correct proportion to the Chambers of Commerce, thus saving duplication and making for a degree of simplicity in working. The Chambers of Commerce, on the management side, merely have to attend to the actual manning of the plant and the payment of staff wages.

General Comments: France is organised economically and administratively in such a way that works in the principal Commercial Ports and even in the medium sized and smaller ports, affect very extended regions. Harbour works thus retain a clearly defined character of general interest and they are foreign to the efforts that have been made towards de-centralisation. The Government maintains a very strong grip over Port Administration as over all French organisations, and until recent years the French refused to believe in the idea that the maintenance of harbour works should be delegated to local bodies, such as Chambers of Commerce.

It is interesting to note that although the machinery for the granting of autonomy to the major ports has been in existence since 1924, the only Maritime ports which have availed themselves of the opportunity to gain autonomy are Havre and Bordeaux. These two ports took the necessary steps immediately after the passing of the Act and no other French Maritime ports have seen fit to follow their example. It appears, however, that although no legal action has been taken to establish autonomy in the remainder of the Commercial Ports, the power of the Chamber/
Chamber of Commerce and the Consultative Committee has become very much stronger and the Port Directors or Engineers-in-Chief come much more closely under the control of the Chambers of Commerce than would appear to be likely from the statutory provisions.

The Maritime Chambers of Commerce, in addition to taking the responsibility for the management of the ports carried out by the Engineer-in-Chief, are consulted by the Government officials in all harbour matters although these officials are not bound to carry out the recommendations of the Chamber of Commerce if they are in disagreement with them. It is possible for capable officials to do a great deal, through unofficial co-operation, to bring the Chambers of Commerce and the Central Authority into agreement, by hinting at the attitude which would be taken up with regard to the different suggestions and thus enabling only schemes which were likely to receive approval to be put forward.

Nevertheless, even in the Autonomous Ports, the Government keeps supreme control as to the general policy of the port when its financial aid is sought or its supreme power of regulating and approving general programmes is evoked. A series of general powers are delegated to the Administrative Council, but in addition to the rigid control previously mentioned, the greater number of persons who comprise the Administrative Council are State Nominees. Thus, although the Administrative Council of a port is constituted in such a way that the representatives of the local Chamber of Commerce are in the majority, most of the members who represent the Chamber of Commerce are appointed by the Government and not allocated by the Chamber itself.

It/
It thus seems that the practical grip of the Government upon the ports is much stronger than would at first appear. When consideration is limited to the principal ports, the Government really exercises both the legislative and executive power. The former comes within the scope of the Central Administration and the latter is concentrated around the Port Director, who is almost all-powerful as he has the final word in recommending that the Ministry accept or reject the recommendations of the Consultative Committee.

If the users of the port wish to take any action, this can only be exercised through the intermediary of the Consultative Committee and, at the same time, through the Chamber of Commerce of the port.

The ultimate responsibility for all policy which lays down what new works will be constructed, together with their design etc., rests entirely in the hands of Government servants advised by the representatives of local interests, as the Government provides the majority of the capital necessary for financing new works. As a general rule, when new works in the Commercial Ports are carried out, the Engineers-in-Chief review the project and submit the recommendations of any Consultative Committees or Commissions which may have considered the scheme. When the concurrence of the Ministry of Finance has been given, the works are authorised by decree or by the Governmental Council or by simple decision of the Ministry of Public Works.

The system is, however, subject to certain rather serious drawbacks, all of which arise out of lack of flexibility and undue centralisation of control.

Other/
Other Government services, in addition to those coming under the Ministry of Public Works, play a part in the life of the port, such as the Customs and the State Railways. Liaison, even with pilotage, is reported to be weak and with the other services even non-existent. Another slight drawback is that the Port Director only exercises a loose control over those who work concessions in the harbour although the fact that the Chambers of Commerce employ the Engineers in the Ponts et Chaussees to manage their plant simplifies the dual control to a marked extent.

The organisation is in reality very centralised. The part which the Government plays is a capital one and the actual users of the port only play a very small part in the conducting of its affairs.

Nevertheless, it is singular that in spite of the large measure of agitation which has existed since 1912, the only two Marine Ports which have availed themselves of the machinery for autonomy are Havre and Bordeaux. It may be that this is due to disappointment with the results obtained there, but it appears that the objections to the system have been largely overcome within the existing Laws, through the appointment of officials who are men of tact, judgment and understanding, and who defer to the known wishes of the local Chambers of Commerce and Administrative Councils as far as is possible, without neglecting their own primary duty of upholding the interests of carrying out the general policy laid down by the Government.
ITALY.

In Italy the administration of Commercial Ports is carried out by the State, according to a system very similar to that which is in force in France, with the exception that the powers of the State are divided between the Ministry of Public Works, which sees to the construction and maintenance of works, and the Ministry of Communications. In the majority of ports, both of greater and lesser importance, the management is carried out by the Ministry of Communications from its head and local offices, through the Mercantile Marine Service, although, in Genoa and Venice, there are special organisations somewhat akin to the French Autonomous Ports. Under the terms of the law of 2nd. April 1835, which is still in force, all traffic comes under the General Management of the State Railways.

The Ministry of Public Works has divided the Commercial Ports into four classes. Passenger traffic is officially ignored as an element bearing on the importance of a port, through the derivation of the laws from those of 1865 when passenger traffic in Italy was negligible. This, however, is not of great importance as the ports having the greatest passenger traffic also have the largest goods traffic.

The regulations which still govern the administration of ports were approved by Royal Decree of 26th. September 1904, and modified by the Royal Decree of 12th. July 1912. These lay down the rules for the practical application of the law, and indicate the limits of the duties of the various authorities which are appointed for the supervision of the ports, and for the regulation of minor matters, such as fishing, and also the general technical policy of the ports.

The/
The constructional and maintenance services are supervised by the Ministry of Public Works, which executes the works coming under its supervision through the local offices of the Roads and Bridges (Civil Engineering) Department, which has the authority of the Central Administration to take full responsibility for everything in connection with the works. The State contributes from 20% to 60% of the cost, according to the particular cases and the importance of the ports. The balance has to be contributed by the Provinces which the port serves. State contributions are dependent on the authorisation of the Ministry of Public Works, but those of the Provinces are obligatory. The works themselves are carried out either by public tender or private contract. Recently, owing to the magnitude of the expense of large harbour works, the responsibility for the financing of the undertakings has been largely placed upon the shoulders of the contractors themselves. Instead of a final payment being made on the completion of the works, a system of contracting by deferred payments has been brought into force. The State thus has the work carried out and pays part of the cost during building, and spreads the balance over a number of annuities which vary according to the size and cost of the work, and comprise both capital instalments and interest.

The working of the ports, as already stated, is in the hands of the Ministry of Communications and under the General Management of the Mercantile Marine for everything concerning maritime work, and under the General Management of the State Railways for everything concerning the work of the railways. Under the powers conferred on the General Management of the Mercantile Marine, these services/
services are divided into some thirteen Boards, which have under them the usual staff of Harbour Masters and other officials.

The powers which these bodies enjoy are conferred by Article (163) of the Mercantile Marine code of laws and are somewhat limited owing to the control of the Maritime General Management. They refer to the routine working of the marine service, such as the entry and exit of vessels, anchorages, loading, unloading, storage of goods, the use of beacons, and all matters concerning the policing and safety of the port.

The railway service in the ports is embodied in the general scope of the network of the railways throughout the Kingdom, and their administration is entrusted to the State as far as concerns the main network. The administration is carried out through the General Management at Rome and its decentralised offices. All the normal commercial ports are thus under entire Government control, even though they have local administration offices.

**Autonomous Ports:** Two ports, however, have a certain degree of autonomy. They are the Autonomous Syndicate of the port of Genoa and the "Provveditore" for the port of Venice.

**Genoa:** The Port of Genoa is the oldest in the political constitution of Italy, as it was instituted by the law of 12th. February 1903, No.50, for a duration of sixty years. The Authority was employed to look after extension and improvement works in the port of Genoa and the administration and co-ordination of services attached thereto/
thereto, and also has the control of special funds which were granted to it. The administration is vested in a Syndicate which is set up by the State, the State being represented upon it by its President who is appointed by Royal Decree. Delegates are also appointed to the Syndicate by the Provinces which bear part of the expense of the port, and from the Communes and from the Genoese Provincial Economic Council, the latter having three representatives. There are also two representatives of the Turin and Milan Provincial Economic Councils and two workmen's representatives.

All these delegates form the General Council of the Syndicate, which usually meets in the first fortnight of October each year and holds extraordinary meetings whenever necessary. It has all the powers requisite for the functioning of the Syndicate, and these powers are similar to those of any general Board of Directors of a Company, although they are limited by the special nature of the undertaking and certain statutory provisions.

In addition to the General Council, there is a Committee of the Syndicate composed of the President and seven members chosen for their ability. This Committee is the driving power of the whole work of the Syndicate. In it is really vested the power of the whole Authority and the responsibility for its general management. It supervises the executive and management offices which carry out all the routine work of the Syndicate.

The Syndicate receives from the State a fixed contribution of 4,500,000 lires (say £50,000) per annum for carrying out works and the expenses incurred by the varying services, while from the Provinces and Communes it/
it receives a contribution which varies and is in proportion to the expenses borne each year for the new works. In addition, there are the general revenues derived from rents, the rates for the use of plant, and the harbour dues. During the twenty-five years of its existence, the Syndicate has carried out some very important works much more rapidly than would have been done under State control, and it has worked very usefully in the daily life of the port by co-ordinating in a single body all the various services. This has been particularly valuable in the Port of Genoa, as a peculiar characteristic of its constitution is that, owing to local circumstances of space, congested working is unavoidable but the fast transit of goods is of vital importance.

Venice: Prior to its annexation by Italy, Venice was under Austrian rule, and the port had a different system of organisation to the Italian ports, being run as a subsidiary to the railways, much as a large Railway Goods Station. After its annexation this difference from other Italian ports gave rise to serious drawbacks so that before the War the Government had seriously considered centralising all the functions in the life of the port in a single organisation. This was not done until after the War when, by a Royal Decree of 30th. January 1919, No.96, a Royal Commissioner was appointed with the title of "Provveditore" of the port, and in August of the same year the "Provveditorato" was founded and the composition, functions and limits of its powers were defined. The "Provveditorato" is composed of a President (the Port "Prevveditore"), an Administrative Council with a limited number of members selected from the Administrations/
Administrations concerned and the port workers, and a Consultative Committee which comprises other persons who are competent to give their opinions on any matters submitted to them.

The "Provveditorato" is responsible for the commercial working of the Port of Venice, all works for the maintenance of the port, the management of all sites within the area of the port, and any new construction which may be undertaken. The supervision of the plant installed in the new Marghera industrial port and the co-ordination of services has also been entrusted to it so as to obtain smooth working in the organisation of both ports.

The new organisation fulfilled the purposes assigned to it by the original decree, and in spite of the suppression of most other post-war autonomous port authorities by the decree Law of 7th. February 1926, No.222, special financial powers were granted to strengthen its position.

Other Autonomous Bodies: The excellent example shewn by the Autonomous Syndicate of the Port of Genoa led the State Administration to decide to create similar organisations for other ports, and immediately after the War, autonomous bodies were created for some sixteen ports, including Savona, Spezia, Naples, Ravenna and Messina. The State entrusted the powers of carrying out new works to these bodies, in addition to some of its own managerial powers. These bodies, however, did not fulfil their purpose, largely because all of them brought forward majestic/
majestic plans for the extension of their ports, which were not at all in keeping with local finances nor the needs of their trade, nor the means of the State. The National Government therefore did away with all these organisations towards the end of 1922 and the beginning of 1923, resuming the responsibility for them on the same lines as had been in force before their creation. A Royal Commission was instituted for the Port of Naples but this also proved unsatisfactory and was suppressed about 1930.

Working Discipline in Ports: The organisation of labour in the Italian ports is peculiar to Italy, and is the result of the corporative movement which had been created by the present regime. From the first year of accession to power of the Fascist Government, rules were laid down as to the discipline of labour in the ports of the Kingdom, by a Decree Law of 15th. October 1923. Under this Law permission was given to the Commissariat for Mercantile Marine (as organisation which has since been absorbed by the Ministry of Communications) to take decisions on its own authority on various matters, such as the limitation of the number of persons attached to the loading, unloading and storage of goods in the ports etc: giving orders to enter such persons' names in lists specially kept for this purpose: the regulation of the distribution of workers amongst the various employers: the limitation of the number of contractors in the aforementioned services: the fixing of charges for port services of a public nature as well as the hours of work.

Another decree was made on 1st. February 1925, No.232, which conferred on the Ministry of Communications
the right of creating a Port Labour Bureau, functioning under the supervision of the Harbour Master, in order to carry out these measures, with additional powers, including that of settling labour disputes.

It also established punishments and penalties for disciplinary faults and transgressions of the rules and tariffs regulating work in the port and of arrangements made by the Labour bureaux, and authorised the Ministry of Communications to settle the amount of pensions for port workers who had become unfit for work owing to accidents or old age, and to regulate the other forms of social relief. It further authorised it to adopt suitable measures for the physical and moral well-being of the working classes.

Under another decree of 23rd. October 1927, in smaller ports the Ministry of Communications may delegate its powers in part or entirely to the Maritime Director and can also arrange that the functions conferred on the Labour Bureaux shall be exercised by the chief official of the local port under the supervision of the departmental Commandant, or the Labour Bureau established in a neighbouring port, while, in the ensuing years, decrees were passed fixing the limits of the powers of the Maritime Directors and laying down rules for the ordering of the harbour staff and their selection.

Under a decree of 19th. April 1929, in addition to the normal rules regulating the selection of managers, the supervisory duties of the Maritime Authority were laid down and their powers over Companies were stated. A Company wishing to operate in a harbour area must first solicit from the Maritime Authority an authorisation to exercise/
exercise its functions, such as contracting for loading, unloading and storing goods, and taking part in tenders for works, using buildings, etc., in short, any of the functions which are normally performed about a port. The Authority has power to veto any such activities of which it may disapprove or which it considers are unjustified, and further, has the power of regulating labour conditions and wages within its district, even although it is not responsible for paying those wages. These Labour Bureaux appear to work with great satisfaction.

General Comments upon Italian Administration: It is difficult to obtain unbiased views as to the efficiency of the Italian system, but there is little doubt that the system is carried out to the general satisfaction of most persons concerned. It must be borne in mind that the overseas trade of Italy, compared with that of other Maritime Nations, is not very extensive, by far the largest proportion of it being carried through the Autonomous Ports of Genoa and Venice. The present Government has made, through the establishment of the Labour Bureaux, an unusual experiment in the regulation of port labour, and through standardisation and regulation of gang strength etc., has done much to de-casualise dock work, the primary object of the Ministry being, of course, to bring about a progressive reduction of loading and unloading charges, while striving to obtain a better use of labour and plant without unduly lowering the average pay of the dock labourers.
RUSSIA.

In Russia the Harbours are administered under a system of strict State supervision. They are controlled by the Narkomvod (People's Commissariat of Water Transport) which controls all means of river and sea transport and everything connected therewith, including harbours. Lenin laid down the basic principle - "in water transport an iron military discipline must be created." This precept has been rigidly carried out, as the whole of the management of the harbours on either a National or Local basis is placed in the hands of the officials who are responsible to the Commissar of Narkomvod, who is himself responsible to the Communist Party and the Gosplan (State Planning Committee).

Narkomvod, through its officials, administers the ports of Russia as subsidiaries to the waterways, and inland and ocean fleets, in a somewhat similar manner to that in which ports owned by Railway Companies are administered in Great Britain and the Union of South Africa, in that the ports are regarded as an integral part of the system and not as separate entities. Narkomvod thus maintains and repairs all the fleet, ports and waterways, supervising the adjoining lands and traffic. It arranges all charges and executes all works, though major schemes of reconstruction and new works must be brought before the Government for confirmation by the Gosplan. The detail organisation of the harbours is similar to that in most other harbours in the World, with the exception that particular attention is given to the preparation and training of qualified workers and the raising of their mental standard by State technical schools, while the arrangements for feeding and housing of workers are carried/
USSR

THE COMMUNIST PARTY.

GOSPLAN (The State Planning Committee)

NARKOMVOD
(People's Commissariat of Water Transport)

THE COMMISSAR OF NARKOMVOD

Deputy for Land Transport, Deputy for Sea Transport, Political Deputy.

The four "Zurts".

THE DIRECTOR OF ZUMORFLOT
(Central Body of the Sea Front).

THE DIRECTOR OF UMORFLOT.

OTHER PORT DIRECTORS OF 1st RANK.

THE PORT DIRECTOR.

Technical Assistant, Port Captain, Chief Engineer, Planning & Finance Dept., Workers Food Supply, etc., Purchasing, Staff Administration.
carried out by their sub-departments.

Structure of Narkomvod: At the head of Narkomvod is the Commissar who is aided by three deputies, one for sea transport, one for inland transport, and the other a political deputy. The whole structure of the Commissariat is laid down in the Decree concerning the Re-organisation of the Management of Water Transport, 15th March 1934. The whole organisation comes under the Commissariat of Transport and ultimately under the Commissar of Transport, who is assisted by the Soviet of People’s Commissariat which is summoned by the Commissar once in two months. This, together with the Narkomvod itself, is the Chief Consultative Body. It has a permanent Committee dealing with transport, composed of representatives of all the different departments but there does not appear to be any special committee designed to deal with water transport, apart from Narkomvod, or with the ports in particular.

Within the Commissariat of Water Transport, four central and industrial territorial departments were organised for the direction of the local departments of water river transport, known as Zurt, while for the conducting of sea transport the Zumorflot (Central Body of Sea Fleet) was organised. Its fundamental aim is the direction, technical support, instruction and control of the State Sea Fleet, Commerce, Ports, Wharves and Docks; also the regulation of sea navigation and its supervision. The head of Zumorflot is the Director appointed by the Commissar of Water Transport, assisted by one deputy appointed in the same way. His work is divided into seven sections - (a) exploitation of the fleet, (b) port management, (c) marine engineering, (d) capital construction, (e) planning, (f) finance, (g) staff administration. Under
port management is carried out all normal port administration, with the exception of constructional work, which is carried out under its own department.

The rights and duties of the Director of Zumorflot are laid down under the regulations of 15th. March 1934, according to which the Director must act in accordance with the laws of the U.S.S.R., the direction of the Communist Party and Government, taking his orders from the Commissar of Water Transport. His primary duties are to guarantee the carrying into life of Governmental and Party decrees, as well as those of the higher planning departments, and the orders from the Ministry of Transport, and he is personally responsible for their execution, together with the management of all the activities of Zumorflot. He is responsible for the proper guidance of all the departments which come under him, all discipline, and the execution of all works in accordance with the pre-conceived programme, both as to time and cost.

**Commercial Sea Port (Decree of 8th. April 1934):**

A commercial sea port is an independent economic-productive organisation, subordinate to the Director of Umorflot, a sub-division of Zumorflot, and, as already stated, the duties comprised are generally those met with in other ports of the World, with the addition that the Port Director is also responsible for the suburban farms and provision bases to supply the workers and their canteens with provisions and for their housing. The Director of a port of first rank is appointed by the Director of Umorflot and confirmed by the Director of Zumorflot. He has under him (1) technical assistant, (2) port captain, (3)/
(3) chief engineer, (4) planning finance department, (5) workers' food supply department, (6) purchasing department, (7) staff administration department. In addition to managing the whole production transport and industrial section, he has power (a) to conclude agreements and contracts of all the economic operations in the port, (b) to issue deeds of warrants, (c) to represent the port in all local law and arbitration cases, (d) to engage and dismiss all workers and impose disciplinary penalties and encourage good workers.

**Gosplan:** The Gosplan (State Planning Committee) draws up and submits to the Cabinet SMK of the Union, for confirmation and approval, yearly and quarterly balance sheets and plans for the distribution of materials and equipment to all branches of the National economy and to it Narkomvod has to submit all its requisitions for sea and river transport vessels, buildings, port works, etc. The financing is carried out by credits based on Bank credits and not against goods or commodities. Thus no advancing of money is done except in the case of building new works and factories, the restoration of old ones and similar items of capital construction. The State Bank has nothing to do with the planning and regulation of industry. The financing of all public works, including ports, is carried out through the State Banks by allocating credits against the different districts, ports and works, in accordance with the estimates which have been approved of and passed by both Narkomvod or its officials, to whom the necessary authority has been delegated, and the Gosplan and the Financing Committee of the USSR and the PFO (Planning Finance Department of Narkomvod). In similar manner/
manner, credits for current expenditure, wages, etc., are allocated against the individual departments, whilst all receipts are paid into the central funds.

Labour: The position occupied by labour in the ports is naturally unique and special care is taken to ensure the competency and honesty of the workers and their educational advancement, although as stated earlier, Lenin laid down that in Water Transport an iron military discipline must be created. That has been expanded by the need of appreciating the importance of work as "a matter of honour, glory, and heroism" - Stalin. In view of the complete nominal disappearance of unemployment, the utilisation of labour on hand is of vital importance. All industrial concerns are obliged to hire workers through the Labour Organisations, with the exception of specialists and a few others. Only picked men are eligible for the Water Transport service and there is a complicated system of promotion and reward for excellence, these rewards being not in money wages but in such items as the first chance to better house accommodation, university education of children, rest houses at old age, being sent abroad for further study, etc. The officials who recommend workers for acceptance in a gang or employment, have to take personal responsibility for the capabilities and qualities of those whom they have admitted. Excellence of administrative ability or work is rewarded by public recommendation, of which examples are many, presentation of diplomas, placing the name on the role of honour, up to decoration with the Order of the Soviet Union. In like manner, very heavy disciplinary measure are taken for the breaking of the "labour discipline." Thus, apart from criminal/
criminal acts and common dishonesty, the breaking of discipline leading to accidents and wreckages are brought up for trial. Thus such offences as dis-regard for orders, absence from duty, negligence in looking after vessels, signals, etc., may be punished in many ways, varying from rebuke to detention up to twenty days, or degradation up to dismissal from the Water Transport Corps. Leaving work without good reason leads not only to dismissal from the service but surrender of the right to live in houses belonging to the Water Transport Organisations. In the event of the negligence or carelessness being gross, the guilty party is liable, in accordance with his position and responsibility, to be suspected of sabotage or counter revolutionary activities, in which case the punishment is life imprisonment or death. An accurate record of all disciplinary measures must be kept and black marks can be wiped out by subsequent good conduct.

It is extremely difficulty to obtain an unbiased opinion as to the efficiency of the system of Port Administration in Soviet Russia. It is an integral part of the whole economic structure of the Country and as such is liable to the praise and criticisms which are levied against that Country as a whole. From a theoretical point of view it leaves little to be desired in that the ports are directed as one unit with certain means of adaptation to local needs through the de-centralised officials resident in the ports themselves. The weakness however seems to lie in the enormous amount of responsibility which is placed upon each official and the diversity of the functions which he is called upon to perform/
perform and supervise. It is impossible for the senior officials to have knowledge, much less expert knowledge, of, for example, matters so widely dissociated as shipping, farming, and house property, and weaknesses of the system are those which result from the difficulty of finding men of sufficient calibre to occupy the positions which have been created. Allegations of dishonesty and incapacity are frequently made but it is probable that the reason given above is that which is largely responsible for the lack of harmony and smooth running which shippers appear to experience when visiting Russian Ports.
MUNICIPAL ADMINISTRATION.

Municipal Administration is the standard type which is found in operation in Continental European Ports facing the sea-board of the North Sea. The principal ports of Belgium, Holland, and the Scandinavian Countries are owned by the Municipalities which they serve and their administration is generally similar, although considerable differences in the detailed management, methods of accounting, etc., exist in the different Countries or in different ports in the same Country.

The administration is directly in the hands of one or a certain number of representatives of the Municipality, the whole of the financial arrangements being made by the Town, with or without State assistance or subsidy in connection with capital works.

The systems of Local Government vary so much that it is necessary to examine the outstanding examples in some detail before it is possible to review the system as a whole, but it appears that, in general, these harbours have been fortunate in the possession of an enlightened leadership which has fully realised the dependence of the Townships upon the success of their harbours and have not made the interests of the ports subservient to purely Municipal matters.

Principal examples of Municipal ownership are the Ports of Antwerp, Rotterdam and Stockholm, representing the Countries in which they are situated, while Hamburg, which is owned by the State of Hamburg, can best be regarded as a form of Municipal Administration.

The administration of these Municipally owned harbours is very similar to that of a Trust owned harbour in/
in Great Britain, in that the administration and general management of the port is left in the hands of responsible officials who advise the representatives of the Municipality from whom they, in turn, receive their instructions.

Certain of the representatives of the Municipality occupy a position very similar to that held by a Chairman and Conveners of the Trust and they also are assisted in their deliberations by Committees or Advisory Councils, which, however, have no deliberative vote, particularly if appointed members of commercial interests are included upon them. It is rare for commercial interests to be able to elect representatives even to these Advisory Committees, such persons being appointed by the head of the Municipality or by its members and not by the representatives of the commercial interests which they are supposed to represent.

The principal difference between the two systems lies in the objects for which the harbour is administered. Thus, under the Municipal system, particularly as seen upon the Continent, the harbour is primarily a Municipal Trading Concern and as such is run principally in the interests of the Town as a whole, the harbour finances playing a very large part in the ordinary Municipal budget. In the event of the wishes of the Harbour Authority and the commercial interests being at variance, the latter have really no power to influence but can only protest or act through effecting changes in the Municipal representation.

The Port of Antwerp: The City of Antwerp is governed by the members of a Communal Council who are elected by universal suffrage. This Council elects a College/
ANTWERP
THE COMMUNAL COUNCIL OF ANTWERP.
THE COLLEGE OF ALDERMAN. 7 MEMBERS.

The Burgomaster—1s—the Alderman directing Commerce and Navigation.
The Alderman directing Finance and other City Matters.

Management of Maritime Works
Chief Managing Engineer

Electro-Mechanical Equipment
Mec Engineer in Chief—Manager

Captaincy of the Port
Harbour Master

Quays Warehouses etc.
Director

Port Receipts
Collector of Port Dues.

Civil Construction
Engineer

The Port Traffic Commission
(Advisory only and meets on convocation of the Burgomaster)
(usually once a month)

THE BURGOMASTER.

4 TOWN OFFICIALS.
1. Chief Managing Engineer
2. Electro-Mech Engineer
3. Port Captain
4. Director of Quays etc.

4 STATE OFFICIALS.
1. Directeur en Chef des services Marine de l'Escaut
2. The Maritime Commissary
3. The Director of Roads and Bridges
4. The Director of Customs

2 RAILWAY OFFICIALS.
1. Permanent Way Service
2. Exploitation

5 DELEGATES OF BUSINESS.
1. 2 Delegates of Chamber of Commerce
2. 1 Delegate of Import & Export Union
3. 1 Delegate of Belgian Shipowners Union

125.
College of seven Aldermen who control all the departments of the Municipal Administration. All decisions are taken by the College after deliberation by its members who sit for this purpose many times a week as required. The College is presided over by the Burgomaster, selected in a general but not compulsory manner from among the members of the Communal Council. He is appointed by the King and is Chief of Police. He is thus also the chief magistrate responsible to the Government.

One of the Aldermen deals with commerce and navigation and his duties include the management of the port properly speaking. The Burgomaster himself has occupied this position for about the last ten years. Another Alderman directs the department of Public Works and supervises the execution of works which have been decided upon by the Department of Commerce and Navigation.

The Communal Council is a deliberating body which is responsible for all the administration, but by law it delegates its powers of execution to the Aldermen's College. It appoints within itself various Committees such as Public Works, Finance, Commerce, Navigation, Claims, etc., which examine all questions before they are submitted to the Communal Council. These Committees, presided over by one of the Aldermen, are advised by the managers of the various services concerned.

The principal officers of these services are the General Managing Engineer, the Mechanical Engineer-in-Chief, the Harbour Master, the Director of Warehouses, etc., and the Collector of Port Dues.

The ultimate responsibility for the management of the port lies in the hands of the Municipality, although/
although the actual management is in the hands of the Burgomaster, who is appointed by the King.

The Burgomaster and Council are assisted in their deliberations by the Port Traffic Commission. This Commission was instituted so as to establish harmony between the City's administration of the Port on the one hand and the various State services and commercial corporations on the other hand. It meets on the convocation of the Burgomaster, as a rule once a month, and deliberates on all matters concerning the prosperity of the port. These deliberations enable business representations to express their wishes or formulate criticisms, although they are never followed by voting. The functions of the Commission are purely advisory in order to bring about co-operation of all the services of the port. The Commission is presided over by the Burgomaster of the City of Antwerp, and its members are - four Town Officials directing the port services; four State Officials; two Officials of the Railway Company residing at Antwerp, who direct the permanent-way service and management; and five delegates representing Antwerp business (two of the Chamber of Commerce, one of the Import and Export Union and one of the Belgian Shipowners' Union.)

The stevedoring is done by private contractors and the actual handling of the goods is done by individual labourers and co-operative associations, some of whom are banded in "nations" which are forms of co-operative societies. They have, however, no monopoly.
NOTES - All the above 10 members are appointed by the Town Council.
The Port of Rotterdam: Rotterdam, which handles some 72% of the trade of Holland, can be taken as another typical example of administration by the Municipality. Until 1930 the harbour and City were so bound together that the revenue and expenditure of the port were dealt with in the general financial administration of the Town, it being impossible to consider the financial working of the port separately.

Just as the dock finances were not kept apart, so there was no central body entrusted with the management and working of the port, the task being distributed amongst the various organisations of Municipal Administration. The lack of central guidance and management of the port caused the Town Council to decide to centralise the Port Administration. The head of the Municipality is the Council of forty-five members, which is presided over by a Burgomaster, nominated by the Crown, who, unless he is also a member of the Council, has only an advisory vote in the decisions of that body. He also, as head of the police, has an independent task in the Municipality, and he is appointed every six years.

The Executive authority of the Municipality is vested in the Board of Burgomaster and five Aldermen elected by and from among the members of the Council.

Although, according to the Municipal Act, the Aldermen were unable to act independently, the passage of time led to the distribution of tasks being effected among the members of the Board of Burgomaster and Aldermen, although the more important decisions are still taken by the Board in its entirety.

On the 8th. May 1930, the Council centralised the/
the Port Administration, bringing together all the services with the exception of the construction of docks etc. The new Port Authority is under the Burgomaster, who is assisted in his duties by an advisory commission, upon which, besides members of the Council who form the majority, representatives of trade and shipping also have seats.

The Port Management is in the form of a Municipal Trading undertaking, headed by a Director who is appointed by the Town Council. He has control of all matters regarding the port with the exception of new constructional work, which is still carried out under the Technical Service of the Municipal Works Department. The port has now a general Municipal Financial Administration of its own, the administration being set up on a commercial basis so that a proper review of the undertaking as a unit can be obtained. The Director is answerable to the Burgomaster, to whose particular field, as a member of the Board of Aldermen, the Harbour Management belongs, and the Director keeps in touch with him about all matters not concerning the daily routine. Before introducing important matters to a meeting of the Board he hears the Advisory Committee for Harbour Management. This Committee, of which the Burgomaster is Chairman, consists, besides the latter, of ten members who are appointed by the Town Council, six from their number and four from among other citizens. Their function is advisory only, as the Town Council alone has the power of deliberation and approval or veto.

The Director has charge of all the books of the undertaking, the collection of revenue, etc., and his department bears the cost of administration and upkeep of all/
all the Municipal Harbours, Quays, etc., so far as owned by the Town, as well as the payment of Interest and Depreciation on Capital invested therein. Any surplus is appropriated by the Municipality which also has to make up any deficit.

The Harbour Management also includes all the routine work of the harbour in every description, with the exception of the railway traffic which is handled under agreements which have been made between the Municipality and the Netherlands Railways, a semi-public authority. The management of the railways is entirely in the hands of the latter, although construction is carried out mutually.

The Ports of Sweden: The ports of Sweden, of which the most important are Stockholm and Goteborg, are also examples of Municipal ownership.

Since the 1st. January 1909, the Customs Harbour of Stockholm has been administered by a Municipal Board of Management. The Board consists of a Chairman appointed by the Board of Administration and chosen from among the Burgh Councillors, and six other members, one of whom is appointed by the King, one by the Stockholm Chamber of Commerce and four by the City Council. The Board is assisted in the management of the port by a General Manager. Under him the administration is divided into four departments, viz., the Harbour Office for the executive work; the Harbour Buildings Department for construction and maintenance work, under the direction of a Chief Engineer; the Accounts Office for the bookkeeping/
Stockholm.

The City Council of Stockholm.

The Harbour Board

Chairman appointed from among the burghe councillors by the Board of Administration

1 Member appointed by The King
1 Deputy
1 Member " The Chamber of Commerce
1 Deputy
4 Members " The City Council
4 Deputies "

The General Manager of the Port

Secretary

The Accounts Office
Chief Accountant

Harbour Cash Office
Chief Revenue Collector

The Harbour Office
The Port Captain
The Harbour Buildings Dept.
The Chief Engineer

The Lock Office.
keeping and personal matters, under the direction of the Chief Accountant; and the Harbour Cash Office for the cash movement and collection of revenue, under the management of the Chief Revenue Collector.

The General Manager is also assisted by the Chief Administrator of Finance. The only traffic activity directly carried out within the port by the Board is the management of the working of the cranes. In all other respects the routine work of the traffic is carried out by independent persons, although the Board naturally supervises the movement of vessels and goods in the harbour and collects all dues. There is also in Stockholm a considerable free port, which is administered by the Harbour Board but managed, on behalf of the City of Stockholm, by a Joint Stock Company - Stockholm frihamnsaktiebolag, almost the whole of whose capital was subscribed by the City.

An interesting feature of the Harbour Board is that for each of the six members, apart from the Chairman, who are appointed by the King, Chamber of Commerce, and the City Council, there is also a deputy member or substitute appointed by the same sources. It is intended that if the member is unable to attend a meeting of the Board, his deputy member must take his place, so that at all meetings of the Board the various interests are fully represented. A Vice-Chairman is also chosen from among the members of the Harbour Board.

GREAT BRITAIN.

Apart from small fishing harbours, there are few examples of Municipal ownership in Great Britain, the two/
two largest being the Port of Bristol and the Port of Preston. Both of these ports are run as separate units apart from the Towns, although their administration is in the hands of Committees composed entirely of members of the Municipal Council.

The Port of Bristol: The Port of Bristol is managed by the Port of Bristol Authority, which has a Chairman and ten members of Committee, appointed out of the members of the Bristol City Council, the routine management being in the hands of a General Manager assisted by a Secretary, Collector of Dues, and an Engineer, who are responsible for the usual minor officials required by a large harbour. The financing of the harbour is carried out by the issue of Harbour Loan or Stock, the Interest and Sinking Fund obligations of which are guaranteed by the City of Bristol. The harbour is subsidised out of the general rate of the Bristol Corporation to the extent of £40,000 per annum. This sum, added to the general revenue, enables the harbour to meet its commitments for working, maintenance and sinking fund charges, but without which the harbour would be run at a loss. The port has been noteworthy for the excellent attendance at meetings of the members constituting the Harbour Committee, their average attendance being 84%. The City of Bristol has, within the last year, experienced a change of Party enjoying a majority upon the Council. In consequence of this every member of the old Board has been recently displaced, including the Chairman who had served continuously upon the Board for thirty-five years and has been largely responsible/
PRESTON.

THE PRESTON BOROUGH COUNCIL.

THE RIBBLE COMMITTEE.

CHAIRMAN AND TEN OTHER MEMBERS, all councillors or aldermen.

Secretary and Solicitor.  The General Superintendent.  The Ribble Engineer  Borough Treasurer

Managerial Staff.  Port Service Staff.  Engineering.  Dredging.
responsible for bringing the Port of Bristol to its present state of prosperity. None of the men who at present constitute the Harbour Committee have had any previous experience of Port Administration and one cannot but feel that such a position is fraught with grave danger.

The Port of Preston: The Port of Preston is administered by the Ribble Navigation Committee whose members are the Mayor, Aldermen and Councillors of the Burgh of Preston. They elect from among their number a Chairman and Vice-Chairman, who is not actually the Mayor. The harbour is administered as a separate unit although it is, in fact, a Municipal trading organisation. The Ribble Navigation is also served by the customary officials although, owing to the smaller size of the Port, the duties of Treasurer are carried out by the Treasurer of the Burgh of Preston. The general capital requirements of the Port of Preston are financed by the transference of sums to and from the Corporation's Loan Pool, the losses of the undertaking being borne out of the general rates of the Burgh, which presumably would derive the benefit of a profit should one be enjoyed.

Municipal Administration is generally very similar to administration by a Public Trust, in so far as the general organisation is concerned. The only differences arise through the difference in the constitution of the controlling body. The City Councils are primarily elected, not upon the basis of business qualifications/
qualifications or competence, but upon the ordinary Party principles which govern Municipal politics. For the members to be trained in matters connected with shipping is therefore generally the exception to the rule, and they have to familiarise themselves with harbour affairs whilst actually carrying out their duties. The great weakness of the system, however, is due to the prominence of Party Politics in Municipal affairs and to the instability which sudden changes of policy bring into a service in which an unusual measure of foresight is required and one which, more than in others, is completely dependent upon outside influences for its prosperity.
Most of the German Ports are situated upon her rivers and the very large extent of inland navigation and barge traffic has had a pronounced effect, not only upon the design of the harbours, but their administration and finance, through the large amount of trans-shipment trade and consequent economy in quay space required. In Germany the view is taken that harbour charges upon goods and shipping should be reduced to the minimum, the majority of the burden of the construction and maintenance being borne by the populace as a whole through National or local taxation. The management of the ports is in the hands of the State or Municipal administrations, and construction and maintenance are kept separate from each other. The State or Municipality invariably provides all the quays and similar works of a capital nature, and usually, but not invariably, the maintenance and operation as well.

A peculiarity of the German form of administration is that no warehouses are ever owned by the Port Authority itself, which only owns its quays and a limited number of transit sheds. The warehouses are all owned and managed by independent Warehousing Companies. The capital of these Companies is generally provided by the State or Municipality and they really are a form of Municipal trading organisation, but apart from the financial tie, they function as independent units. In some of the harbours these Companies administer the actual harbour facilities in addition to their warehouses. An attempt is made to make the Warehousing Companies financially sound, while the quasi-business form has been designed to overcome/
overcome the extreme rigidity and lack of initiative which is found in German officials. There is, however, no uniformity of practice and keen competition for all trades exists between the different harbours, whose rates have been forced well below the economic level.

Hamburg is the most important German port and is situated at the head of ocean navigation on the River Elbe. The navigable channel is maintained by the State as a separate item. The port belongs to the State of Hamburg which owns all the land and plant in the harbour. Concessions are sometimes granted to Companies for the working of this plant, provided the plant is maintained in a good order and a rental paid. A great part of the free port has been let to the Hamburger Freihafen-Lagerhaus-Gesellschaft, which has to construct its own buildings. The State has a controlling financial interest in this Company as in many others. The administration of the port is entrusted to the "Deputation for Commerce, Navigation and Industry." This is composed of members of the Senate, representatives of the people and of the Deputation of Finance and various Chambers of Commerce. This Deputation is divided into two sections - General Administration, and Administration of Works. The former carries out the general harbour management through its officials, supervising quays, traffic and the commercial statistics offices, while the latter in the same way supervises all construction and engineering in the river and the port and all mechanical equipment.

The administration of Bremen, the other principal ocean port, is very similar to that of Hamburg. Here the controlling authority is the Deputation of the Port and
the Railways. It is a State administration in which the Senate and the Community are represented. The general administration is carried out upon similar lines to the port of Hamburg, while the majority of the operation and warehousing is done by the Bremener Lagerhausgesellschaft. This Company is actually the Agent of the State and it carries out its duties with official authority, its expenses or deficiencies being met by the State directly.

The administration of the State Port of Emden is in the hands of the Prussian Department of Hydraulic Works at Emden. The controlling authority, however, is the Governmental President at Aurich, together with the Minister of Commerce and Industry. The maintenance and working of the loading installations are managed by the Emdener Hafen Umschlaggesellschaft m.b.h. (limited), which is also a semi-State trading Company.

In Germany considerable difficulty has been experienced through the obstruction and lack of enterprise on the part of the State Officials who are in control of the harbours, and the Trading and Warehousing Companies have all been formed largely since the War in the hope of overcoming these objections. In most cases the former Officials were absorbed into the new form of administration in the hope that, through close association with purely business men, a homogenous form of administration, which would take an active part in the promotion of trading interests, would be achieved.

Up till 1934 the alteration had proved satisfactory but the recent changes in the Political constitution in Germany have made it impossible to form a clear picture of the present state of affairs.
UNITED STATES OF AMERICA.

The Ports and Harbours of the United States of America come directly under the War Department and their general supervision is entrusted to the Chief of Engineers, U.S. Army, Washington, and his Corps of Engineers.

In spite of this fact there is a considerable division of function between the Federal Government and the actual owners or proprietors of the ports proper, which are in a variety of hands, such as the Cities, individual States, Railway Companies, and other forms of private enterprise.

The control of the navigable waters is vested in the Federal Authority, although its sphere of action does not extend, in most cases, to the actual water-fronts, which, as recently as 1910, were mainly controlled by private interests. The period since 1910, particularly the period immediately following the Great War, showed a marked tendency towards public ownership and operation of ports, the control being vested sometimes in the State, sometimes in the City, and sometimes in an independent Port Authority.

The Federal Government lays down, in the interests of navigation, the lines in navigable water-ways beyond which building or reclamation into the river cannot take place. In nearly every case it has provided the original protection works, breakwaters, etc., at river entrances, and has dredged the channels, whose depths it maintains. The quays and other facilities have been provided by the City or the State in which the harbour is situated; sometimes both City and State have quays in the same harbour; while in nearly every harbour some of the landing/
landing places have been constructed and are maintained by private enterprise, although in most cases the proportion of quayage thus owned is small.

For the whole of the facilities of a port to be under the control of one Authority, as attains in Great Britain and France, is the exception to the rule. Private quays are present in nearly all ports, while in some ports, like Baltimore and Chicago, portions of the quayage may be the property of the City, State, Federal Government, or the Railway Companies, all working in competition with each other. The ports are served by permanent officials as in most other harbours, but the system of superior control and administration is unique in the New World. Although a distinction is made in the United States between Port Trusts whose members are appointed by the City, and Port Trusts whose members are appointed by the State, this difference, when compared with other World ports, is not great, as it merely concerns the actual appointment of the members and whether the City or State is responsible for the financial obligations in connection with the harbour.

In all cases, the numbers of Trustees or Commissioners is very small, usually from three to five, and the members are appointed by the local Mayor or State Governor and they serve for periods of from three to six years, rarely receiving a remuneration save fees to cover their expenses.

The Governor or Mayor is not bound to select them to represent any special interest, and it is customary for him to choose the members of his own Political Party. Thus harbour administration and policy is subject to
Political fluctuations in the United States, with its attendant evils. Cases of dismissal, even of the permanent officials, for political reasons are not unknown, although a strong effort to make and keep these appointments non-political has been made of late years in the more important harbours.

On the Atlantic Sea-board and the Great Lakes the ports are more frequently controlled by a Department of the Municipal Government, generally subordinate to the governing body of the State, their powers and duties being defined sometimes by statute, as in the case of Philadelphia and in others by local ordinance. The most important of these harbours are Milwaukee, Philadelphia, Los Angeles, and Portland Oregon. In the latter port the control of the river channels and navigation is in the hands of the Public Corporation, "The Port of Portland," while the control of quays, sheds, etc., is in the hands of "The Commission of Public Docks," a Municipal department of the City. Thus the administration of a port is looked upon as a function of the Municipal Government comparable to the administration of parks and streets, except that the port facilities are directly related to the volume of commerce and frequently produce substantial revenues for the City Treasury. The ports are regarded as ancillary to the Cities and no attempt is made to make them financially self-supporting. It is considered that it is just that the capital burden should be thrown upon the rate-payers in order that dues may be reduced to a level which will merely cover working and maintenance expenses, in order to foster the trade from which the whole Town benefits.
NEW ORLEANS

BOARD OF COMMISSIONERS
(Non-political Board of 5 members appointed by Governor of State) (all unpaid)

President  Vice President  Secretary  Treasurer  Chairman of Finance Committee

GENERAL MANAGER
elected by the above

Assistant General Manager

Chief Engineer  Supt. Cotton Warehouse  Traffic

General Agent and Superintendent of Docks  Supt. Grain Elevator  Auditor  Harbour Control
The Ports of Portland, Maine, Boston, Mobile, New Orleans, and San Francisco, amongst others, are controlled by State Commission, subject generally to the appointing power of the Governor. In each instance port administration has been looked upon as something more than local concern involving a territory extending into the interior and therefore the port has been made the responsibility of the State and not the local City. In Portland, Maine the Board is composed of five members, four appointed by the Government and one by the Mayor of the City. In Boston, prior to 1911, the port was under the control of the Board of Harbour and Land Commissioners but by an Act of 1919 the entire authority was vested in the Division of Waterways and Public Lands of the State Department of Public Works. In New Orleans the Board consisted originally of five members appointed by the Governor with overlapping terms of five years each. In 1920 the term of office was extended to six years and it was provided that the Commissioners "can only be removed by the Governor for cause or causes to be preferred against them in writing after public hearing and proof of the sufficiency of the said charges to justify their removal." The Commissioners were required to elect a President, Vice-President, Secretary, and to appoint deputy Commissioners to perform the duties of Harbour Masters, Wharfingers, etc. The steps taken in 1920 to ensure freedom from political interference are of special interest, as they are the result of complete changes in the Board in 1912, 1915, 1916, and 1919. A complete new Board was appointed in 1921, since when members have retired in rotation. Between 1912 and 1921, a period of nine/
nine years, thirty-one Commissioners had held office on a Board of five; an average tenure of office of eighteen months per member.

In San Francisco the Commissioners are three in number and are appointed by the Governor of the State and hold office at his pleasure. A change in the Political Party of the Governor therefore may result in a complete change in the constitution of the Board.

The system of administration which operates more closely to the British Port Trust is found in Portland Oregon, in which the Commissioners, five in number, are elected at a general election in the district for four years with overlapping terms of office. The Board chooses from its members a President, Vice-President, Treasurer and Secretary. The Board is forced to employ its own staff and fix a rate of compensation for its employees, but "no Commissioner shall either directly or indirectly receive any salary or compensation for his services as Commissioner."

Thus, in most cases in the United States, the actual administration is carried out by Commissioners whose duties are honorary and who employ full-time officials over whose duties they have general powers of supervision.

A Port Authority in the United States, apart from the regulation of its approaches and navigable waterways by the Federal Authority, is entirely free to carry out its administration in whatever manner it likes. Competition between harbours serving the same district has been intensely keen and in many cases, notably those of New Orleans, the Mississippi Ports, and the harbours on Puget/
Puget Sound, has reduced the competing harbours to financial straits, as the facilities provided were in excess of the requirements of the trade of the district and the facilities of an individual harbour could only be kept occupied at the expense of the other harbours in the district by keeping rates below the economic level.
RAILWAY ADMINISTRATION.

Great Britain.

The four Railway Companies of Great Britain, considered as one unit, are one of the largest owners of harbour undertakings in the World. They have under their control about one hundred and fifty harbours of varying size, or three-quarters of the total number of Commercial Harbours in the British Isles, though many are very small. These harbours amongst them account for about 20% of the total tonnage of vessels trading in Great Britain.

The four Railway Companies are completely independent and there is no uniform system of Port Administration common to all of them, nor does any one Railway administer all its harbours upon a uniform plan.

The reasons are primarily geographical and historical, being due to the scattered and irregular distribution of the harbours and the way they have come into the Railway Companies' hands, and the fact that each Railway Company itself has resulted from the fusion of many similar Companies and Undertakings which had built up differing systems of administration of their own.

The two Companies which control the largest groups of Ports are the Great Western Railway Company and the London and North Eastern Railway Company, which own the majority of the Railway Ports on the West Coast of England and Wales, and on the East Coast of England and Scotland, respectively. The Southern Railway Company has only one port of major importance - Southampton - while the London, Midland & Scottish Railway Company owns several ports of considerable size scattered upon both the East/
East and West Coasts bordering the industrial districts of Scotland and England.

All the Railway Companies consider their harbours as forming integral parts of their systems and they are primarily utilised as feeders to the Railway systems and are run with the primary object of increasing the profits earned by the undertakings. Generally speaking, no attempt is made to run them as independent units although separate accounts are frequently kept of the working and maintenance expenses. No records are published of the proportions of the Railway Companies' capital allocated against individual dock undertakings, although the total cost of construction of harbours, or groups of harbours, is known.

The general policy with regard to the administration of the harbours is laid down by a Board of Directors acting through the General Manager or Chief Officer of the system, whose policy and instructions are carried out by the Chief Officers in the various districts and their Assistants upon the commercial, traffic, civil, and mechanical engineering sides. It is in the routine administration that differences occur and these differences are of interest because they show great diversity of local administration.

**Great Western Railway:** The Great Western Railway controls the most complete group of ports from a geographical standpoint. Those which have the largest trade are the six ports situated in the South of Wales - Barry, Cardiff, Swansea, Newport, Port Talbot and Penarth. These ports are all treated as a group and come under the control/
control of the General Docks Manager at Cardiff. Under him are the Docks Managers at Newport, Cardiff (including Penarth), Barry, Port Talbot and Swanses. Fishguard comes under the jurisdiction of the Divisional Traffic Superintendent at Swansea, acting for the Superintendent of the Line at Paddington, while the other minor ports, such as Bridgwater, Dunball, Aberdovey, etc., are similarly managed.

On the Engineering side the Civil work is controlled from Paddington and the Mechanical from Swindon. On the Civil side are two Divisional Engineers, one responsible for the work at the Eastern Ports (Newport, Cardiff, Penarth and Barry), and one for the Western ports (Port Talbot and Swansea). The responsibility for the work at all other ports devolves upon the various Divisional Railway Engineers in whose divisions these ports are situated. On the Mechanical side a similar organisation exists, with a Docks Mechanical Engineer at Barry as well as at Newport, Cardiff (including Penarth) and one at Swansea.

The whole of the dredging operations are controlled by the Chief Civil Engineer at Paddington with a local staff at Cardiff, while the maintenance of craft, boilers, machinery, etc., is the responsibility of the Marine Section of the Docks and Steamboats Department, controlled by the Chief Docks Manager.

This system of divided control is open to certain objections through lack of co-operation between departments, but it is not greater in the case of the docks than in the other departments of the Railway Companies, and when organisations are already established at/
at Paddington on the Civil Engineering side and at Swindon on the Mechanical side, use can be made of the resources of these organisations for the benefit of the docks. In practice this system of administration is more convenient and efficient than might appear on the surface, mainly because there is great freedom of staff movement and transport from place to place within the Company's system.

There is a close co-operation between the local Technical Officers and the local Docks Managers and, through them, with the Chief Docks Manager as well as their own Chiefs. The Docks Committees of Directors meet at Paddington several times throughout the year and the Chief Officers concerned are present at such Committee meetings. Matters affecting all departments are discussed and authority is obtained by the Chief Officers for carrying out new works etc., subject to confirmation by the full Board.

London and North Eastern Railway: The method of administration employed by the London and North Eastern Railway Company has been that of Area Management, the docks being regarded as an integral part of the Railway system.

In comparing details of the London and North Eastern Railway with the Great Western Railway, it must be borne in mind that the geographical area covered is more than three times that covered by the Great Western Railway. The territory covered by the London and North Eastern Railway has been divided, for administrative purposes, into three areas, each of which comes under the co-ordinating control of an Area Manager, under whom ports are administered as if they were large Goods Stations.

There/
There is thus no separate department controlling port management, apart from the general commercial management of the line. There is, however, a separate organisation on the Engineering side, with a Chief Engineer for Docks stationed at Hull who has charge of the Civil Engineering side of all the Railway docks, and a Docks Machinery Engineer at Darlington. Both these men are specialists in port work, and through the co-ordination of a large number of ports, the services of men of a higher calibre are obtainable for the use of the whole system than could have been obtained by the individual ports acting as independent units.

In addition to this centralised control on the Engineering side, there are, of course, Civil and Mechanical representatives at each port, but the whole docks system is merged into the departmental Railway organisation. The Area Managers have power to give immediate decisions upon matters of importance. If new facilities are proposed, their commercial justification is advanced by the Area Managers on costs supplied by the technical staff, and they are able to avoid unnecessary duplication in the areas under their control, which they manage as one unit. The proposals naturally have to be approved by the Chief General Manager and the Directors before they can be authorised, but such authorisation is only required for works of major importance, the Area Manager having, within a certain competence, power to personally authorise works of minor importance. This concentration of power in the hands of the Area Manager obviates many of the causes of complaint and lack of co-operation which are sometimes made against Railway administration/
administration. In local details, however, there are
great diversities in the division of function between
the minor officials and in the routine management, when
individual ports are compared. Thus Hull, one of the
largest ports in the Country, which handles a very large
general trade in addition to an extensive trawling
business, comes very closely under the jurisdiction of
the Area Manager, while the port of Harwich, specialising
in Continental through-traffic, comes under the
Continental Management Department.

The Company had to take over varying types of
administration which had grown up under the ownership of
the constituent Railway Companies. No drastic steps to
ensure uniformity of practice have been taken, but there
appears to be a general tendency, where changes are made,
to establish as large a measure of uniformity as possible.

Southern Railway: The Southern Railway only
administers one port of large size, Southampton, which
now deals with 37% of the United Kingdom ocean passenger
traffic.

Until the year 1892 the Southampton Docks were
administered by the Southampton Dock Company, but they had
found themselves incapable of raising the necessary
financial resources to modernise their facilities and the
Company was acquired by the London and South Western
Railway, now merged in the Southern Railway.

Since its purchase for a cost of about one-and-
a-half million pounds, the Railway Company has invested a
further eleven million pounds in the port, the majority of
which has been spent to provide accommodation for trans-
Atlantic liners. Within recent years the majority of
this/
this trade was diverted from Liverpool to Southampton owing to the proximity of Southampton to Continental ports of call, the facilities provided in Liverpool for this trade having been left unused.

The port of Southampton was primarily developed to encourage the passenger traffic over the Southern Railway system to London. Much of this traffic has now been lost to the Great Western Railway system owing to the practice of liners stopping at Penzance to set down passengers, leaving only goods to be unloaded at Southampton.

This short history of the trans-Atlantic trade shows the loss which can be sustained through lack of co-operation between the Authorities controlling the ports which compete for the same traffic.

The Southern Railway ports are operated by one Chief Officer who works under the direction of the General Manager of the Railway Company, who both advises and acts as the mouthpiece of the Directors who generally only lay down matters of broad policy, particularly so far as port work is concerned. The organisation of the Southampton staff is more similar to that of the standard dock undertaking than that of most Railway owned ports, being the usual chain of command, all the officials being responsible to the Chief Docks Officer.

London, Midland and Scottish Railway: The principal ports owned by this system are Grangemouth, Fleetwood, Ayr, and Garston. These ports are all widely scattered geographically and the Company has no centralised system of Port Administration. The ports are in fact an integral part of the Railway system and their administration and/
and management is carried out in exactly the same way as if they were large Railway Stations. Thus for commercial matters they come under the Area Commercial Manager, and for Civil and Mechanical questions they come under the Civil and Mechanical Engineers, while all matters connected with shipping come under the Marine Superintendent.

This system of divided control is not very satisfactory, either from the point of view of those using the facilities provided, or the Company itself, through the division of function and responsibility between a number of officials who are not primarily concerned with port work, and who are of approximately equal status within the Company.

UNION of SOUTH AFRICA.

The harbours of South Africa have formed part of one concern, The South African Railways and Harbours, since 1910, when the three existing independent Railway systems were amalgamated. As only one mode of land transport existed at that time, the fusion of Railways and Harbours caused no great technical difficulty. A uniform method of control and management was established and the same tariffs were made applicable to all harbours. In South Africa the same vessel frequently calls at many of the principal harbours on the same trip, and the uniformity established by this system was a great advantage.

It was laid down in Section (127) of the South Africa Act of 1909 that "the railways, ports and harbours of the Union shall be administered on business principles, due/
due regard being had to agricultural and industrial development within the Union. So far as may be, the total earnings shall not be more than are sufficient to meet the necessary outlays for working, maintenance, betterment, depreciation, and the payment of Interest due on capital not being capital contributed out of railway or harbour revenue....."

Provision such as the foregoing is not found in connection with the operation of British Railway-owned harbours or many other State controlled harbours, and in the Union it appears that this policy has, on the whole, been successfully carried out.

In the Union the harbours are controlled by purely Railway Officials, the actual control being vested in the Manager of the system on which the harbour is located. As a result, the co-ordination of particular harbour services becomes involved and frequently impossible, as co-operation between the harbours is possible only through the medium of the local System Manager by way of the General Manager in Johannesburg. The latter official is so fully occupied with matters affecting Railways that a great deal of his attention cannot be devoted to a thorough co-ordination of the harbour services. The central control, situated hundreds of miles inland, is only able to deal with the Railways, while the local System Manager who controls the harbour has grown up, not with shipping or harbour control, but with the Railways. His training and the position he occupies in the Railway system make it well nigh impossible for him to view a harbour primarily as a shipping and commercial concern and not exclusively as a Railway/
Railway concern, while the possibilities of road transport are apt to be ignored. Where two different forms of transport, the one having a magnitude out of all proportion to the other, are closely linked as in this amalgamation of harbours and railways, the unmistakable favourable results have other marked disadvantages which can be clearly observed, of which five examples are specifically mentioned by the Harbour Affairs Commission in their Report made in 1934. Firstly, they express the opinion that if harbour control had been carried out in a more independent manner, numerous activities such as storage of goods and provision of industrial sites would long since have developed and new sources of revenue would have been opened up. Secondly, the separation of the railways and harbours from financial and accounting considerations was carried out in a somewhat arbitrary manner. Cranes for instance did not fall under actual harbour control but under railway control, and in consequence formed a sort of "No Man's Land," with consequent inefficiency. The third example referred to the application of harbour regulations and tariffs which hampered not only shipping but also the actual operation of the harbour, such as the closing down of all harbour activities at sunset and the recommencement thereof at sunrise. Although Railway ownership was not blamed for the origination of this inadequate arrangement, it was felt that under a more flexible system of administration, such regulations would not have been kept in continuance. The fourth example referred to repairs to floating craft which were all carried out in the railway workshops, even though it had/
had been proved that the repair work could be undertaken privately at a considerably reduced cost, and more expeditiously. The system in their view was "as ludicrous as endeavouring to repair a locomotive in a dry dock in order to make the dry dock more payable."

The final example referred to the carrying out of harbour works. Through the railway monopoly there was an entire absence of competition and no possibility of checking the price and quality of the products or the design, and the Commission formed the opinion that at least 30% could be saved on the cost of construction of the larger works by calling for tenders. Competition was not allowed in connection with the designing or carrying out of harbour works, with the result that substantial works were built at too high a cost, through the lack of incentive on the part of the Engineer responsible to carry out the works cheaply.

Further, the Commission referred to the appointment of a person as Consulting Engineer who had no experience of the particular class of work, through lack of appreciation by the Railway Management of the problems involved, and certain unhappy experiences resulting therefrom.

The Commission recommended the establishment of a completely new system of harbour management and co-ordination of harbour services. It felt that it was absolutely essential that there should be a greater freedom in the harbour concern, and that the matter should form the subject of careful study, to be undertaken by officials who were not primarily Railway men. It considered that there was a need for providing greater independence/
independence for the harbour organisation within the existing railways and harbours system by means of the establishment of a permanent harbour management with better co-ordination of the services at the different harbours, and the creation of Harbour Directorates, not falling under the control of the System Managers.

The Commission deemed it absolutely necessary that Harbour Directorates should be established at Durban and Capetown, independent of the local Railway Management, and came to the conclusion that an independent Harbour Management under the control of a General Manager (harbours) with the rank of Assistant General Manager in the combined concern of railways and harbours, should be established, with other subordinate officers.

Following upon the publication of this Report, the General Manager of South African Railways and Harbours expressed the opinion in his Report for the year ended 31st. March 1935 that the suggested division of responsibility as between railway and harbour working would lead to friction and inefficiency, and that under the present organisation the requirements of the harbours were not subordinated to those of the railways, or vice versa. He also stated that this organisation had been extensively commented upon by various authorities on the subject as being an ideal one from every point of view, and that it certainly was entirely suitable to South African conditions of railway and harbour transport.

Considerable dissatisfaction must have been expressed, however, to lead the Governor General for the Union of South Africa to appoint a Commission to enquire into the South African Harbour affairs.
## RAILWAY DOCKS, HARBOURS AND WHARVES

**Financial Statement — Great Britain: Year 1936. S. Africa 1935.**

<table>
<thead>
<tr>
<th></th>
<th>Southern Railway</th>
<th>G W R</th>
<th>L M S R</th>
<th>L N E R</th>
<th>British Railways Totals</th>
<th>S African Railways Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Expenditure</strong></td>
<td>£18,738,265</td>
<td>£21,015,932</td>
<td>£10,136,410</td>
<td>£26,009,040</td>
<td>£12,516,382</td>
<td>£16,759,150</td>
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<tr>
<td><strong>Expenditure</strong></td>
<td>842,486</td>
<td>1,766,320</td>
<td>978,506</td>
<td>2,551,385</td>
<td>6,185,393</td>
<td>703,290</td>
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<tr>
<td><strong>Gross Receipts</strong></td>
<td>1,200,139</td>
<td>1,886,021</td>
<td>991,335</td>
<td>2,733,031</td>
<td>6,864,435</td>
<td>1,560,713</td>
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<tr>
<td><strong>Nett Receipts</strong></td>
<td>357,653</td>
<td>119,701</td>
<td>12,829</td>
<td>183,646</td>
<td>679,042</td>
<td>307,339</td>
</tr>
<tr>
<td><strong>% Return of Nett Receipts or Cap Exp</strong></td>
<td>2.60</td>
<td>0.57</td>
<td>0.13</td>
<td>0.71</td>
<td>0.94</td>
<td>1.83</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>S.R.</th>
<th>G W R</th>
<th>L M S R</th>
<th>L N E R</th>
<th>S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imports Total</strong></td>
<td>1.85</td>
<td>2.20</td>
<td>1.12</td>
<td>1.98</td>
<td>2.47</td>
</tr>
<tr>
<td><strong>Exports Total</strong></td>
<td>1.42</td>
<td>2.01</td>
<td>1.12</td>
<td>5.37</td>
<td>3.10</td>
</tr>
<tr>
<td><strong>Total of Imp. &amp; Exp</strong></td>
<td>1.27</td>
<td>3.21</td>
<td>2.25</td>
<td>7.35</td>
<td>5.57</td>
</tr>
</tbody>
</table>

The above figures are given in million tons.
Ownership by Companies or Corporations (apart from Railways or Canal Companies) which manage a port for profit is usually classed under private ownership.

The occasions upon which the whole of a large port has been administered in this way are few, although many important docks and systems of docks, notably in the Port of London, were constructed and administered for long periods under this form.

The highly speculative nature of port operation for profit has shown that this form of administration is not suitable for large undertakings. As has already been stressed, the capital cost of port works is extremely high and there is no certainty that the works, when constructed, will not be abandoned at short notice through obsolescence or some change in trade conditions.

The history of the private Dock Companies in the Port of London gives the most typical example. After operating for close on one hundred years, the various London Dock Companies found themselves in extreme financial difficulties, due, to some extent, to rash and premature expenditure on capital and errors in administration, but primarily to the change of circumstances in the natural growth of the size of vessels and changes in the types of trade. They found themselves incapable of keeping pace with the times and had to be taken over by a Public Corporation. Nearly all the other individual Dock Companies have suffered a somewhat similar fate. Thus the Southampton Dock Company, through financial straits, had to be taken over by the Southern Railway Company, and the Preston Docks Company by the Town of Preston.
There are, however, a few small ports which continue to flourish as Companies, where peculiarities of geographical situation or circumstances guarantee them a steady trade. The most important of these are the Ports of Ardrossan, Seaham, Granton, Larne, and Milford Docks. Ardrossan and Larne are particularly well suited geographically for communication between Scotland and Northern Ireland and have maintained their flourishing condition through the stability of the Irish trade.

Seaham Harbour, which is almost entirely a coal shipping port, is in the happy position of being the natural outlet of one Colliery with which it is administered in very close co-operation. The Chairman of Seaham Harbour is Lord Londonderry, upon whose land the Colliery is situated. In a similar manner Milford Docks serves one individual Colliery, although it also is the headquarters of a considerable trawling fleet.

Granton Harbour is of particular interest in that until 1932 it remained the property of one individual, The Duke of Buccleuch, although in that year it was transferred into a Private Company under His Grace's ownership. Its flourishing position is due to the exceptional financial status of the individual owning it and the policy of the Harbour in specialising in certain trades for which it is particularly suited. It is in close proximity to the very much larger Port of Leith, which has, without doubt, developed considerably at the expense of Granton, both Ports serving the Edinburgh district. Although at various times, moves have been made for the purchase of/
of Granton by Leith, none of them have come to fruition, but at the present time the two ports work in harmony.

In Great Britain the Dock and Harbour Authorities' Association was formed in 1919 following certain difficulties which were experienced by the individual harbours in pressing claims against the government for dock and harbour dues, as it was felt that it was advisable to constitute a central association vested with a general authority to act in the common interest.

The objects of the Association as laid down in the constitution are to consult and co-operate on such questions of common interest to the members as may from time to time be deemed desirable to take up.

Membership of the Association is open to Packet Dock, Conservancy and Stevedoring Undertakings, the Manchester Ship Canal Company, and also to each municipality as one or more harbour or docks in the British Isles. There are at present fifty-three members representing approximately 70% of the total tonnage of vessels with cargo trading to the ports of the United Kingdom. The docks owned by the railway companies account for a considerable proportion of the other tonnage, and the remainder is accommodated in docks and harbours not represented by the Association.
PORT AUTHORITIES ASSOCIATIONS.

There are in existence many Associations designed to promote the interests of Port Authorities in most of the Maritime Countries of the World. These Associations are purely advisory and membership is voluntary. Although they have no executive powers, they are in a position to represent the consensus of opinion in the ports which comprise their members.

In Great Britain the Dock and Harbour Authorities' Association was formed in 1919 following upon certain difficulties which were experienced by the individual harbours in pressing claims against the Government for dock and harbour dues, as it was felt that it was advisable to constitute a Central Association clothed with a general authority to act in the common interest.

The objects of the Association as laid down in the Constitution are to consult and co-operate on such questions of common interest to the members as may from time to time be deemed desirable to take up.

Membership of the Association is open to Public Dock, Conservancy and Pilotage Undertakings, the Manchester Ship Canal Company, and also to such Municipalities as own or control harbours or docks in the British Isles. There are at present fifty-three members representing approximately 72% of the total tonnage of vessels with cargoes trading to the ports of the United Kingdom. The docks owned by the Railway Companies account for a considerable proportion of the other tonnage, and the remainder is accommodated in docks and harbours not represented by the Association.

The/
The members of the Executive Committee are elected at the Association's Annual Meeting held in February, for seven districts in England and Wales, two in Scotland, and two in Ireland, from nominations submitted by Authorities in the respective districts. The Committee normally meets seven or eight times in a year. The detailed work is performed by standing Sub-Committees appointed by the Executive Committee for the year. The personnel of the Sub-Committees consists for the most part of officials of the Member Ports, and they meet at the offices of the Association in London, their travelling expenses being defrayed by the nominating Authority.

The objects as laid down in the Constitution provide a wide field of activity, although it is entirely of an advisory nature. The principal field is work of a Parliamentary character and that involving contact with Government Departments. When new legislation is being framed the Association does much valuable work in getting amendments made to proposed legislation where, either inadvertently or otherwise, it is found that the interests of Port Authorities are being infringed. The Parliamentary Sub-Committee which considers Bills in Parliament and prepares protective and other amendments, is the most active of the Sub-Committees. The others deal with dock and factory matters, rating and valuation matters, International Marine Conventions, and Buoyage and Lighting of Coasts. Apart from the Parliamentary and legal work, little is done to co-ordinate the different ports which comprise the Association, whose members remain completely independent. The Association is run on the lines of a voluntary/
voluntary Association with a skeleton staff and such legal expenses as may be necessary are provided by a levy upon constituent members in proportion to their size.

Similar bodies exist in New Zealand and Australia - The Harbours Association of New Zealand, and the Interstate Conference of Australian Harbour Authorities. These bodies are honorary members of the Dock and Harbour Authorities' Association.

In France there is also a Port Association - the Association des Grands Ports Francaise - through which it is possible for the members of the individual ports to express a corporate view. As all the French ports are State controlled, its powers are somewhat limited and purely advisory.

In the United State the American Association of Port Authorities exists as a flourishing organisation. Its functions are also largely advisory although its staff and organisation are very much larger than the British Dock and Harbour Authorities' Association. It was first formed in 1912 and in 1914 the title was changed from "National" to "American" in order to obtain the co-operation of Canadian Authorities who at once responded; Montreal, Hamilton and Toronto joining the same year. The Association was in great danger of dissolution immediately after the War, but in 1920 it embarked on a career of eager and active progress, constituting Committees on a variety of matters, these Committees showing the types of subjects dealt with by the Association.
Committee -

On Standardisation and Special Research.
On Harbours and Shipping.
On Port Development and Construction.
On Maintenance.
On Port Administration and Finance.
On Fire Prevention.
On Hazardous Cargoes.
On Law and Legislation.
On Public Ownership.
On Foreign Trade.
On Publication.

A very extensive number of booklets are published by the Association, from Codes of Port Ethics and Papers on Port Finance, to Bibliographic notes dealing with ports and harbours. In addition to keeping a watch on all Law and Legislation, there are numerous Sub-Committees whose primary object is to collect the best available technical data relating to the subject with which they are concerning themselves, this information being made available to all constituent members and much of it published through the medium of the Association's monthly magazine.

Beyond unofficial and advisory work, the Association has no powers to enforce standardisation or compliance with their recommendations.
The prefix (\#) indicates correspondence with the person named.

The prefix (\|) indicates personal discussion with the person named.

(T) indicates administration by Trust or Commission.

(N) " " by National State.

(M) " " by Municipality or Local State.

(R) " " by Railway Company.

(P) " " by Private Undertaking.

(D) " " divided between different bodies.
GREAT BRITAIN.

DUNDEE: (T)

Net Registered Tonnage of Vessels - 1,186,797.
Number of Vessels - 3,539.

Dundee Harbour Trust Centenary by J. Hannay Thompson and George G. Ritchie.

Published Accounts and Official Handbook of the Dundee Harbour Trustees.

Dundee Harbour Acts.

* | J. Hannay Thompson, General Manager and Engineer to Dundee Harbour Trust.

LONDON: (T)

Net Registered Tonnage of Vessels - 62,151,310.

"History of the Port of London" by Sir Joseph Broodbank

"The Port of London, Yesterday and To-day" by Sir David Owen.

The Published Accounts of the Port of London Authority 1937.

The Port of London Handbook.

"London, The Port of the Empire."

* Sir David J. Owen, General Manager to the Port of London Authority.

*| Sir Cyril Kirkpatrick, formerly Chief Engineer to the Port of London Authority.

ABERDEEN: (T)

Net Registered Tonnage of Vessels - 1,012,120.

Accounts of Revenue and Expenditure of the Harbour of Aberdeen 1936.

* J. Hay Petrie, Manager and Treasurer, Aberdeen Harbour.

ARDROSSAN: (P)

Net Registered Tonnage of Vessels - 942,986.

The Accounts of the Ardrossan Harbour Company.

*| H. Hopperton, General Manager and Secretary, Ardrossan Harbour Company.
BELFAST:  (T)
Net Registered Tonnage of Vessels - 6,423,024.
Notes on the Constitution of Port Authorities in the United Kingdom, including Belfast.
The Accounts of the Belfast Harbour Commissioners 1936.

BLYTH:  (T)
* C. E. Baldwin, General Manager and Secretary, Blyth Harbour Commission.

BRISTOL:  (M)
Net Registered Tonnage of Vessels - 3,733,343.
Number of Vessels - 8,057.
Statement of Accounts and Statistics, Port of Bristol Authority 1937.
* Alfred J. Lloyd, Secretary, Port of Bristol Authority.

CORK:  (T)
Abstracts of Accounts, Cork Harbour Commissioners, 1936.
* Eugene Gayer, General Manager and Secretary, Cork Harbour Commissioners.

DUBLIN:  (T)
* E. H. Bailey, Secretary, The Dublin Port and Docks Board.

GLASGOW:  (T)
Net Registered Tonnage of Vessels - 7,582,141.
Number of Vessels - 13,025.
The Clyde Navigation Trust Handbook and Published Accounts 1937.
* John Wilson, General Manager and Secretary, Clyde Navigation Trust.

GRANTON:  (P)
Net Registered Tonnage of Vessels - 591,355.
Number of Vessels - 3,793.
GREENOCK: (T)

Net Registered Tonnage of Vessels - 1,960,718.
The Accounts of the Trustees of the Port and Harbours of Greenock 1936.

* H. Gough Gilcriest, General Manager and Secretary, Port and Harbours of Greenock.

HARTLEPOOL: (T)

Accounts of the Hartlepool Port and Harbour Commission, 1937.

*| John W. Goldson, Engineer and Secretary, Hartlepool Port and Harbour Commission.

LARNE: (P)

Net Registered Tonnage of Vessels - 160,459.
Number of Vessels - 200.

*| A. Larmour, Secretary, Larne Harbour Limited.

LEITH: (T)

Net Registered Tonnage of Vessels - 2,211,248.
Number of Vessels - 6,158.

Accounts of the Commissioners of the Port of Leith 1936.

*| J. D. Easton, Clerk and Superintendent, Leith Dock Commission.

LIVERPOOL: (T)

Net Registered Tonnage of Vessels - 21,023,956.
Number of Vessels - 19,028.

"The Port of Liverpool, Its Rise and Progress."
The Standing Orders, and the Published Accounts of the Mersey Docks and Harbour Board 1936.

* Sir Lionel Warner, General Manager, Mersey Docks and Harbour Board.

LONDONDERRY: (T)

Net Registered Tonnage of Vessels - 737,069.
The Accounts of the Londonderry Port and Harbour Commissioners 1936.

*| R. S. Cripps, General Manager and Secretary, Londonderry Port and Harbour Commission.
MIDDLESBROUGH: (T)

The Accounts of the Tees Conservancy Commission 1937.

* F. T. Nattrass, General Manager, Tees Conservancy Commission.

NEWCASTLE-UPON-TYNE: (T)

Net Registered Tonnage of Vessels - 7,149,452.
Number of Vessels - 7,855.

Accounts etc. of The Tyne Improvement Commission 1936.

*| Albert Blacklock, General Manager and Secretary, Tyne Improvement Commission.
*| R. F. Hindmarsh, Chief Engineer, Tyne Improvement Commission.

PRESTON: (M)

Net Registered Tonnage of Vessels - 579,525.

Annual Report and Statement of Accounts, Port of Preston Authority 1935.

*| J. G. Kerriweather, General Superintendent, Port of Preston Authority.

SEAHAM: (P)

Net Registered Tonnage of Vessels - 913,219.
Number of Vessels - 1,511.

Accounts of the Seaham Harbour Dock Company 1936.

* W. E. Blackburn, Secretary, Seaham Harbour Dock Company.

SOUTHAMPTON: (D)

Accounts of the Southampton Harbour Board 1936.

* W. G. Gubbins, Clerk to the Southampton Harbour Board.

SUNDERLAND: (T)

Net Registered Tonnage of Vessels - 2,597,403.

Accounts of the River Wear Commissioners, 1937.

*| W. H. S. Tripp, Chief Engineer, The River Wear Commission.
British Railway Harbours.

The Ministry of Transport Railway Returns.

London and North Eastern Railway Company:

*George Mills, Divisional General Manager (Scottish Area).

*J. Ness, Traffic Assistant to above.

Great Western Railway Company:

*R. Carpmael, Chief Docks Engineer.

*W. J. Thomas, Chief Docks Manager, Cardiff.

London, Midland & Scottish Railway Company:

*W. Yeaman, Commercial Manager.

Southern Railway Company:

Southampton Docks, 1936.

"The Operation of a Railway-Owned Port" by Gilbert S. Szlumper, Docks and Marine Manager.
INDIA and BURMA:

"The Development of Indian Ports" by Sir Charles Stuart-Williams.

Cochin: (T)

Aggregate Tonnage of Vessels - 2,025,701.
Number of Vessels - 1,101.
Administration Report, 1937.

Madras: (T)

Net Registered Tonnage of Vessels - 2,441,739.
Number of Vessels - 697.

G. P. Alexander, Port Engineer, Madras Port Trust.

Rangoon: (T)

Net Registered Tonnage of Vessels - 4,278,639.
Number of Vessels - 1,598.
Annual Report and Accounts, Port of Rangoon, 1936.

W. Forsyth Anderson, Executive Engineer, Port of Rangoon.

NEW ZEALAND:

The New Zealand Harbours Acts, 1923 to 1933.

Auckland: (T)

Henry B. Burnett, General Manager, Auckland Harbour Board.

Wellington: (T)

Net Registered Tonnage of Vessels - 3,653,110.
Jubilee Year Book of Wellington Harbour Board.

D. J. McGowan, Member of the Harbour Board.
D. Gibb, General Manager, Wellington Harbour Board.
AUSTRALIA:

Sydney: (T)

Gross Registered Tonnage of Vessels - 18,131,621.
Number of Vessels - 6,985.


* E. H. Austin, President, Maritime Services Board, New South Wales.
✓ W. H. Cuthbertson, Former Trustee, Sydney Harbour.

CANADA:

Canadian National Harbours Board Act, 1936.
Annual Report of the National Harbours Board.
Annual Reports of the Port of Halifax.
Annual Reports of the Port and Harbour of Toronto.
Canadian Seaports Magazine.

* Sir Leopold Savile of Sir Alexander Gibb and Partners.

UNION of SOUTH AFRICA:


T. H. Watermeyer, General Manager, South African Railways and Harbours.

Geo. Stewart, Senior Lecturer on Civil Engineering, University of Cape Town.

HONG KONG and FAR EAST:

* Prof. C. A. Middleton Smith, Taikoo Professor of Engineering, University of Hong Kong.
"Le Régime Administratif des Ports Maritimes de Commerce" by P. Watier, and Laurent Eynac, Ministère des Travaux Publics.

"Autonomie des Ports" by T. J. Gueritte.


P. Watier, Conseiller d'État, Directeur des Voies Navigables et des Ports Maritimes, Ministère des Travaux Publics

T. J. Gueritte, ex President, French Chamber of Commerce in London.

M. Lafourie, President, Association of Grandes Ports.

M. Cavenel, Engineer-in-Chief and Director of Ports of Finisterre.

Boulogne-Sur-Mer: (N)

Net Registered Tonnage of Vessels - 3,739,611.
Number of Vessels - 2,858.

Compte-Rendu and Statistics.

Bordeaux: (N)

Net Registered Tonnage of Vessels - 4,123,637.
Number of Vessels - 2,537.

Official Handbook.

"The Ports of France" by A. de Vial and F. Leveque, Port Director, Bordeaux.

Brest: (N)

Net Registered Tonnage of Vessels - 1,310,135.
Number of Vessels - 4,168.

P. Mocaer, Vice-President, Chamber of Commerce, Brest.

M. Piquemal, Engineer-in-Chief, Port of Brest.

Havre: (N)

Net Registered Tonnage of Vessels - 11,572,933.
Number of Vessels - 9,018.

Official Handbook.
MARSEILLES: (N)
Net Registered Tonnage of Vessels - 16,611,897.
Number of Vessels - 9,135.
Official Handbook.

NANTES: (N)
Net Registered Tonnage of Vessels - 1,669,268.
Number of Vessels - 2,477.
"Les Ports de la Basse-Loire, Nantes et Saint-Nazaire" by M. Notte.
Official Handbook.

ROUEN: (N)
Net Registered Tonnage of Vessels - 3,957,511.
Number of Vessels - 4,055.
Official Handbook.

ST. MALO: (N)
Net Registered Tonnage of Vessels - 380,229.
Number of Vessels - 1,423.

ITALY.

RUSSIA.
"Soviet Ports, Black and Azov Seas" by Sovfracht.
"Сборник законов и распоряжений, относящихся к водному транспорту." Сост. Н. А. Андреев.
Издание Наркомвода.
A Summary, Laws and Instructions governing Water Transportation, arranged by N. A. Andreiev.
"Water Transport in the USSR for Fifteen Years" by K. M. Lepin.
"Водный транспорт СССР за 15 лет" K. M. Лепина.

Планирование
"Magazine of the State Planning Committee."

* I. Sominsky, Manager of Sovfracht, the All Union Chartering Corporation, Moscow.

GERMANY.

"Administration of German Commercial Ports" by M. Bunnies, Esterbaudirektor, Hamburg.
"Uber Hafenverwaltungen im Inund Auslande" by Dr. Ing. Lohmeyer, Oberbaudirektor, Hamburg.

* Dr. Ing. Lohmeyer.

OTHER EUROPEAN PORTS.

ANTWERP: (M)

"The Belgian Ports" - F. Kinat, J. Zone, Robinson and Van Glabbeke.

* Prof. Joseph Courtoit, University of Antwerp.

ROTTERDAM: (M)

Net Registered Tonnage of Vessels - 20,442,099.
Number of Vessels - 12,640.

"Administration of Ports of Holland" by D. Boomsma, Chief Engineer, Port of Rotterdam.

* N. M. Koemans, Director, Port of Rotterdam.

STOCKHOLM: (M)

Net Registered Tonnage of Vessels - 7,452,000.
Number of Vessels - 25,432.

"The Port of Stockholm" - Sal Vinberg.
"Hamnarnas Organisationsformer" - Sal Vinberg.
"Sveriges Hamnar" - Sal Vinberg.

* Sal Vinberg, General Manager, Stockholm Harbour.
* John Lundwall, Stockholm.
"The Administration of Commercial Ports" by Gotth. Dieden, Director, Port of Göteborg.

"Management of the Copenhagen Free Port" by H. Fugl Meyer, Civil Engineer, Copenhagen.

The Port of Copenhagen Handbook.

W. Laub, General Manager, Port of Copenhagen.

Net Registered Tonnage of Vessels - 7,452,000.
Number of Vessels - 25,432.

Net Registered Tonnage of Vessels - 1,984,675.
Number of Vessels - 7,627.

A. Marcus Tollet, Helsingfors.

War Department Corps of Engineers, U.S. Army - "Shore Control and Port Administration."

War Department Corps of Engineers, U.S. Army - "Rules and Regulations Relating to the Navigable Waters of the United States."


American Association of Port Authorities - Canons of Ethics.

American Association of Port Authorities - Certificate of Incorporation and By-Laws.

H. M. Leppard, Assistant Professor of Geography, University of Chicago.

F. M. Kipp, Harbor Engineer, Department of Public Works, Bureau of Harbors.
BOSTON: (D)

"The Port of Boston" by G. F. Tilton.

* T. A. Maynard, Collector of the Port of Boston.

LOS ANGELES: (M)

Net Registered Tonnage of Vessels - 19,501,120.
Number of Vessels - 6,257.

Annual Report of the Board of Harbor Commissioners.

* Arthur Eldridge, General Manager, Los Angeles Harbor Department.

MANILA: (N)

Net Registered Tonnage of Vessels - 6,175,916.
Number of Vessels - 4,593.

The Port of Manila Year Book, 1935.

MOBILE: (M)

Net Registered Tonnage of Vessels - 3,070,969.
Number of Vessels - 1,408.

Laws Pertaining to Alabama State Docks Commission.

Report to State Legislature.

Port of Mobile Handbook.

* R. M. Hobbie, General Manager, Alabama State Docks Commission.

NEW ORLEANS: (T)

Gross Registered Tonnage of Vessels - 11,440,328.
Number of Vessels - 2,509.

Laws, Constitutional and Statutory, Board of Commissioners of Port of New Orleans.


* Tiley S. McChesney, Secretary, American Association of Port Authorities, New Orleans.

NEW YORK: (D)

Net Registered Tonnage of Vessels - 26,264,567.
Number of Vessels - 5,566.

Tenth Annual Report of the Port of New York Authority.

Facilities and Services.

Port of New York Handbook.

* J. E. Ramsay, General Manager, Port of New York.
PHILADELPHIA: (D)

Net Registered Tonnage of Vessels - 17,845,386.
Number of Vessels - 7,552.

Law of Incorporation and Rules and Regulations.

* Alfred Lynch, Secretary, Board of Commissioners of Navigation.

PORTLAND MAINE: (M)

* Henry F. Merrill, President, Port of Portland Authority.

PORTLAND OREGON: (D)

Net Registered Tonnage of Vessels - 5,676,006.
Number of Vessels - 1,825.


* Philip H. Carroll, Executive Secretary, The Commission of Public Docks.

SAN FRANCISCO: (M)

Net Registered Tonnage of Vessels - 18,926,667.
Number of Vessels - 21,579.

Biennial Report of the Board of State Harbor Commissioners, Port of San Francisco.

* Mark H. Gates, Secretary, Port of San Francisco.

SEATTLE: (D)

Net Registered Tonnage of Vessels - 6,167,101.
Number of Vessels - 1,936.

Port of Seattle Laws.

Port of Seattle Year Book, 1936.

* H. D. Fadden, General Manager, Port of Seattle Commission.
GENERAL AUTHORITIES.

"Port Administration and Operation" by Dr. Brysson Cunningham.

"Docks, Wharves and Piers" by F. M. Du-Plat-Taylor.


Annual Statement of the Trade of the United Kingdom.


"Bibliographic Notes on Ports and Harbours" - American Association of Port Authorities.

"Port Finance" by Perry Young.

"The Dock and Harbour Authority."

"Journal of the Institute of Transport."

Publications of the Permanent International Association of Navigation Congresses.

Dr. Brysson Cunningham, Consulting Civil Engineer.

Sir Douglas Thomson, Ocean Shipping.


H. T. Browne, Howdens Limited, Coastal Shipping.

A. Winter Gray, Secretary, The Institute of Transport.

W. Ashley Cummins, Secretary, Dock and Harbour Authorities' Association.
The writer has visited the following Ports in a professional capacity.

**British Ports:**


**Continental Ports:**

Antwerp, Ghent, Bruges, Terneusen, Havre, Rouen, Boulogne, Calais, St. Malo, St. Brieuc, Brest, Quimper, Lorient, and Fishing Harbours of Brittany.