Cough

By David Thomas

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In the records of Nocology, this disease may be traced back to a Com-
paratively early period. In the writings of Galen and Hippocrates it is known
by the general term Arthritis, which is formed from the word "arthritis," signifying
a joint, indicating thereby the seat of the disease. When it was confined to the
hand it received the name Chiragra;
podagra being used to denote that it affected the foot. The lively satirical
Horace laments the want of a remedy
for this malady, from which occasionally
he was compelled to relinquish those
pleasures of the world which his happy
nature loved too well. Beyond the simple
nomenclature, the knowledge of this dis-
ase possessed by the Ancients was ex-
-tremely vague and indefinite and at
utter variance with the known facts dis-
closed by modern investigation. Hippocrates,
alleged that it depended on imperfectly
conveyed humors, and recommended cold
applications; a method now known to be
both dangerous and inadmissible. Equally
responsible was the treatment of Galen which consisted of bleeding and purging. The modern term, Goit, is derived from the Latin, quita a drop, which connection is traceable to the exploded notion of supposing that a drop of acrid humour is deposited in the affected joint. It is nearly the same in all modern languages.

Unlike the many forms of disease by which the human frame is over and again being assailed, the attacks of goit for the most part need not create serious apprehensions in the mind of the practitioner. At the same time he will find none from which he will experience more embarrassment and disappointment. This cannot be said to arise from its being incurable or even unsusceptible of relief. In an attack of regular and well-defined goit, no disease will more readily yield to the well-directed skill of the physician. When accompanied however with functional derangement or injuries of parts, its path is extremely difficult and perplexing.

Perhaps there is no disease more obtrusively indicated or to such an extent lurking as
in the system unsuspectedly — disturbing the healthy functions; — and swapping from their usual channel other symptoms of disease. It has been observed too that its attack frequently takes place during the continuance of comparatively good health. From this observation it would be fallacious to conclude that the disease had not previously existed. Persons whose time is basely occupied in one or other of the different spheres of life; — merchants whose speculations and mercantile transactions are found in every outlet of a nation’s industry and wealth; — ministers of state, whose minds are directed to the maintenance and integrity of their country’s safety and honour; — philanthropists divining schemes for the reclamation of the fallen, and support of the needy; — even medical practitioners in the active discharge of an onerous and extensive practice, are too little attentive to the small beginnings of disordered health, the precursors of gout, and thus are prostrated by its insidious attack. It cannot be said that in those cases of no very rare occurrence, the patient was entirely free from the taint of the disease.
far less in a state of perfect health. For a proper understanding of the disease a careful and detailed account of the premonitory symptoms is all but indispensable. However, when patients are but little, or not at all in the habit of self-reflection it is barely possible for the elucidation of the subject to get anything like satisfactory answers.

It is conceded on every side that God is preceded by some dyspeptic disorder of the stomach. Dr. Gardner of London asserts that such disorders are not necessarily associated with the first attacks, but more particularly confined to subsequent stages of the disease. From observations made by the same authority, the first or earliest notice of its attacks, is a dull pain in the left side of the chest accompanied by inability to lie on that side, and sometimes by fluttering, irregularity or intermission in the action of the heart. These symptoms may or may not proceed to an actual attack. They may continue for some time and be little heeded by patients, not easily alarmed as to their state of health. Relief may be promptly afforded by a
mild aperient or a single dose of medicine. If, however, these incipient disorders be neglected, symptoms assume a more serious aspect, the patient manifesting inanition, arising from the throbbing and palpitation of the heart. Dyspnoea sometimes accompanies this deranged circulation. There may be in addition thrombosis of the right hypochondrium, and impeded action of the liver. In the above train of disorders, there is found dyspepsia, but it does not in general show itself in the first instance. The disease itself may be defined as a peculiar form of inflammation affecting the joints and is dependent upon a peculiar poison. A slight passing allusion has already been made of the suddenness of the attacks. It is not at all unusual for the patient to return to rest in apparent good health, to be awakened after a few hours by a violent pain in the big toe. The pain is described as that which would be felt from the gnawing of an animal, or the sensation produced by the pustule being touched with a hot iron. It is, in general severe and continues for some hours, lasting as long sometimes as
twenty-four hours. The part is red, swollen and glistening. In a great number of cases the pain goes away suddenly. As a rule, in every five out of six cases, the joint affected is the ball of the great toe. The ankle and knee joints may also be affected, those of the upper extremities rarely so. In gout the fever is generally proportioned to the amount of local disturbance. The urine is scant and high colored, sometimes clear, at other times muddy. Between gout and rheumatism, there is a certain well-marked distinction, which are thus described by Dr. Watson. In gout the small joints are first and chiefly affected, especially the joint of the great toe; in rheumatism, the larger. The redness of the gout inflammation is more bright and vivid than that of the rheumatic, and the fluctuations between agony and ease are more complete and more frequent. Gout usually affects one joint only at a time; rheumatism usually several at once. The inflammation in gout is attended with tender veins, and with more redness than in rheumatism, and is followed, in the majority of instances, by desquamation and itching, phenomena which do not notice at the close of rheumatic inflammation.
Goat is not attended with those drunken acid sweats which are so characteristic of acute fibrous rhumatism. The goat occurs rarely or never, where as rhumatism is not very uncommon before the age of puberty. In goat, though many sometimes suffer, and especially the digestive system, there is no tendency to Carditis; in rhumatism, with far less general disturbance, but more fever, that tendency is very marked. Goat is often rhumatism is never, associated with Chalk-stones, and conformably with this distinction, Dr. Garnwell has taught us that urine acid in excess is present in the blood of the goat, and not present at all of rhumatic patients. Goat is the punishment (some have thought it the privilege) of the rich, of persons who live fully, laboriously, and indulgently. Rheumatism is most frequent in the appanages of the poor, or those who live," — Goat most usually makes its attack about the spring of the year, rarely in autumn and much less frequent at other seasons. Its return is at all times uncertain, but after the paroxysm has subsided, the patient, with an ordinary amount of prudence, may fairly reckon upon his recovery for a considerable time. After an
interval more or less prolonged, its return may be predicted almost to certainty till finally it is established as a constant if an unwelcome guest. The foot as well as being the chief seat of the disease, at the same time takes on a form the safest and least alarming. The nearer it approaches the centre of the body, the more intense and stere.

ating the pain. Gout in the hand is more painful than in the foot, and when it seizes the shoulders, which often happens, the pain becomes visibly increased. Dr. Grant has the fact (which till then had been unnoticed by practitioners) that he never witnessed more stimulating torture than when gout attacked the occiput and the region of the neck.

It has been often remarked how the mildest and most amiable tempers become impatient and irascible during the prevalence of a fit of regular gout. It has also been observed that the intellectual faculties are not impaired by the disorder; but on the contrary, during its Continuance the imaginative faculty is never more brilliant. When the disorder has passed away, the patient generally enjoys better health
than he did previous to the attack. Very often the system has not been sufficiently relieved, and the symptoms of hypochondria continue nearly as before. In such cases, as soon as the patient has recovered the use of the affected limb, that limb or perhaps the other limb begins to ache. This pain gradually increases, assuming all the symptoms, and terminating in another acute and feverish attack, with the only difference that it is more lingering and less painful.

That gout is hereditary does not admit of any a doubt. This is found to be the gradest explanation afforded by all who suffer from the disease. However, the observations of the physician are quite different testimony. The widest possible difference exists among individuals as far as their liability to gout is concerned. Sedentary habits, a luxurious or reckless life, the hardworking student, the over taxed energies of the man of business, have each and all of them this invariable inheritance. The laborious peasantry of the rural districts, and the hardworking citizens of towns are, as a general rule, free from this malady. Some are born with a will marked predisposition to the disease (Diathesis), by others
it is acquired by the nature of their habits, at some ages it is common, while again at others it is rarely met with. Some Causes require considerable length of time before exhibiting the usual manifestations, other influences may rapidly bring on an attack on those previously predisposed.

Dr. Garrod divides the Causes of Gout into two Classes: predisposing and starting. Hereditary predisposition plays a very important part in the development of the disease. On all such a very moderate degree of indulgence is sufficient to awaken the latent energy and bring its victim to despair. If they will not take its bitter fruit, they must satiate only for the sake bare purpose of existence, and with a view to health. Then an other will manifest Causes, known Causes, which, along with a small mass of food, may and do bring on an attack of the disease. Anxiety, much care, agitation, severe mental or mental application, all combine in impairing the Constitution with its baneful influence. It numbers amongst its victim the most illustrious in rank, in science, in literature and in the Councils of the State, Gibb and Milton died from it. The great-
Harvey and Lord Chatham were its victims. Sydenham in the midst of its paroxysms, was consoled by the reflection, that he suffered in common with kings and philosophers, that his sufferings were confined to the mansion of the gra.

It is a well known fact that women are less liable to the disease than men; at least, in a regular and developed form, it is comparatively rare among females. This immunity they owe to the different character of their habits, to the great regularity and parity of their lives, also to circumstances of physical constitution about which medical authorities differ. It seems that menstruation to which women are subject during a considerable portion of their life, exercises a powerful counteracting influence. Cases are recorded when, during pregnancy, the great toe and other joints had been severely attacked; most of those however were cases of hereditary gout, and in this country acquired gout among the female portion of the community is extremely rare. Youth also enjoys almost complete immunity from gout; from an authenticated table...
Of 575 cases furnished by Dr. Garrod, it is observed that gout makes its appearance in by far the majority of cases after the growth of the body is complete, and before the powers begin to decline. When the age is measured by periods of ten years, it is found that the greatest number occurs between the thirtieth and fortieth year. Patients who inherit gout, suffer from its attacks at a much earlier period than when it is acquired. Between genuine gout and true rheumatism, a marked distinction is seen in the influence of age. The former occurring most commonly for the first time after thirty-five, the latter seldom, and with when that period of life has been attained.

The influence exercised by the use of fermented or alcoholic liquors over this disease has been established beyond all doubt, and so powerfully that it is questionable if the malady would have been known had not such beverages been indulged in. There is however very great difference between the power of fermented liquors in inducing gout. It would be very natural supposition, that their power in producing gout would be in proportion to the alcohol they contain. Such however is not the case. Pure spirits when taken exclusively do not
little or no influence as a predisposing agent; whereas the effects produced by wines, beer and porter have a different result. As far as the insufficient data we possess enable us to form an opinion, an approximation may be made of the extent of the disease in the different countries, and what sections of the community are more particularly liable. In Scotland and Ireland, whose populations are pre-eminently "drum drinkers," this disease, unless among the upper sections of society, where wines are an largely consumed, is comparatively rare. Dr. Christie states that for more than thirty years while he acted as physician to the Royal Infirmary of Edinburgh, only two cases came under his notice, both of whom were fat-over-fed butchers. The people inhabiting the countries lying towards the north of Europe, when spirits for the most part form the natural beverage, enjoy comparative immunity from gout. A first participation of the stronger kinds of wine, used in this country as the most-powerful gout producing agents. Closely allied with an undue allowance of wine, there is also very often a luxurious diet, and the other delicacies of the table, which by themselves contribute largely
to its development. Even wine in trace of hereditary gout can be found; a few years' indulgence in the use of wine is quite sufficient of itself to induce an attack. This fact is observable among of working men engaged in bottling wine, and in vaults where wine is stored.

The lightest wines used by the population of France and Prussian Germany, have but little effect in inducing the disorder. Consequently they are in a measure free from it. In some of the larger towns of France and Germany where a stronger kind of wine is used, gout is not uncommon, but nothing compared to the extent found in England. Stout and porter rank next to wine in producing gout. Some of the most severe forms of the disease found in the London hospitals occur amongst the men employed in the large breweries of the metropolis, who had been in the habit of daily consuming large quantities of strong ale and even bitter beer soon after a like influence in Bavaria and Britain, where beer is largely used, gout is by no means uncommon. This found also that cider, to some extent acts as a predisposing cause of gout. In Devonshire, the gouty cider-producing county, this is by no means...
tare. Probably however, a much larger quantity is required than of the stronger kinds of malt liquors. Being then subjected to a difference of power in the various forms of spirituous liquors to produce opium, it must become us to explain the reason of such differences. It is found to be the case that distilled spirits are more insidious than those that have undergone the process of fermentation. This power varies in proportion to the quantity of alcohol they contain. A quantity taken in the form of port wine may be sufficient to produce the disorder, while a similar quantity containing an equal amount of alcoholic stimulant in the form of whisky, may be taken with impunity. The same comparison made between spirits and strong malt liquors holds equally good.

Distilled spirits, as brandy, Hollands, gin, rum, and whisky contain alcohol and water, to which they may be added ingredients for the purpose of colour or rendering it more agreeable to the palate: the absolute quantity of spirit in the different varieties varying from 40 to 70 per cent. On the other hand besides spirits and water, wines contain many other substances: such as
Sugar and gum: Certain fruit acids, as lactic, fumaric, and citric; tartaric of potassium, lime, and magnesia, in addition to which, organic compounds which impart aroma or antiseptic, acetic, and other ethers. So far we are aware no satisfactory explanation has been given why one kind of stimulant is a more powerful predisposing power to hypochondria than another. It cannot matter to their acidity nor their saccharine properties, seeing that the former is but very scant in the constituents of Port and Sherry, while strong malt liquors, which are usually free from acidity than wines possess much power. In the latter no direct ratio can be established between the presence of saccharine matter and the predisposing power of any alcoholic drink, because it exists in large quantities in some of the most potent gut-inducing liquors, in very small amount in others. The only safe conclusion which can be derived at, have been thus drawn by Dr. Garrod:

1. Diluted alcohol in the form of distilled spirit, has little power in causing gut, at least in those who are not predisposed to it.
2. Alcohol, when in combination with other sub.
Substances, as occurs in wines and malt-liquors, becomes a potent cause of gout; and the greater the amount of contained spirit, the more powerful the influence in producing the disease. 3. Neither the acid, sugar, nor any known principle contained in these liquors can as yet be proved to impart to the aleohol its predisposing influence for wine, the least acid, and liquors the least sweot-are often the most baneful. To which may be added (D. Garrott says) with some probability of truth — it also heuric fluids which have little tendency to cause dyspepsia, and those which act more especially as diuretics, can, as far as for so a goal is concerned, be taken with great impunity than beverages of an opposite character. Indigestion, animal diet, and abstinence of exercise are also important causes in inducing gout, and the consideration of which cannot will be separated. Somacheic derangement may be caused equally by a surplus of food and an insufficiency of bodily exercise. It has often already been noticed that gout is rarely found among a hard-working population, who practice a contained veget-
vegetarianism, but on the contrary among the wealthier portion of the community, whose appetite requires highly seasoned dishes, and an addicted to excessive eating. An excessive quantity of animal food has a strong tendency to increase formation of uric acid, which exercises a powerful influence in the development of a:
The varieties of dyspepsia which lead to the formation of uric acid which is considerably beyond the healthy standard, are usually accompanied with sluggish circulation in the portal system, and consequent contracted liver.
The most prominent symptoms of dyspepsia connected with the uric acid diathesis may be thus summed up: heartburn and irritative oppression and frequently sleepiness after food; a feeling of distension in the epigastrium, sometimes accompanied with tenderness; some fullness over the hepatic region, and the edge of the liver often projecting a little below the ribs, and occasionally tender to the touch; the tongue much pierced red at the tips and edges, a disagreeable and clammy taste in the mouth, and the saliva and buccal secretion occasionally more adhesive than natural.
In a former part we mentioned as another of the causes severe study and mental anxiety. The most careless observer cannot fail to notice how quick an influence is exercised by the mind over the various functions of the body. Sudden elevation or depression of spirits of itself effects very appreciable changes in the functions, and in like manner those less startling act as surely though it may be less perceptibly for the time, in disordering the general nutritive system, which in the end may be productive of lasting mischief. A continuous mental application is invariably associated with sedentary habits, little relaxation, a monotonous unvaried pattering. The digestive organs of such a one, must necessarily be unable to discharge its functions sufficiently, and also the tone of the secretory organs, especially of the urinary, must be correspondingly lowered. In this manner circumstances unite in forming an impropriety of blood. Hence the truth of the application of the saying of Stedham, that more wise men than fools suffer from the disease, because of its being often accompanied by other seven mental ills. The influence received by mental affection is,
difficult to define because of its being very often associated with the indulgence in alcoholic drinks.

To determine with anything like exactness the influence exercised by climate in producing a

single of some difficult and always

in some doubtful, because of the other influence

with which climate is invariably connected.

On this subject however there are certain established

facts of no small importance. Gout is more

prevalent in temperate than in hot climates.

Among the natives of the Interior of Africa,

D'Livingstone states that this disease is unknown.

In the East Indies gout is not prevalent, except-

among the European residents. The same holds

good as to the natives of other hot and temperate

climates. In China and Japan it is scarcely known, and

in Italy it is much less frequent than in England

or France. In such cases, to conclude that the

influence is due to climate would be erroneous;

for the natives of those countries indulge less

in alcoholic drinks, their diet is less fatiguing

than that used in the countries where gout

is prevalent. That circumstances other than

climate influence the development of gout,
is strikingly simplified in the fact that in
France, under the republican form of government
the disease was little known, but under the
Empire when debauchery and licentiousness held
universal sway it was common even among the
female sex.

In 1834 Dr. Garnod was the first to make
known at the medical profession in a paper
read before the Medical Chirurgical Society, that
many patients (at least one in four) had been
affected with what he termed "lead poisoning.
This form of disease is confined almost entirely
to painters and plumbers. They appear to be
posing in the habits of those men, capable of
accounting for their peculiar liability to lead,
farther than their being exposed to the influence
of lead. There is no conclusive evidence in support
of other metals having a similar effect. Patients
suffering from gout induced by the ingestion
of lead, seen more particularly to be confined to
the English metropolis. The reason of this is not
at all clearly defined. The same class of artisans
in Scotland, engaged in the same occupation, would
with the same materials, having the same liability
to disease, are not affected with this noxious disease.
Dr. Christian in answer to a Communication of Dr. Garrod's on the subject, lays great stress upon the workmen employed in Edinburgh having a less distance to go to their work, more leisure to remove their overalls or working dress before partaking of their meals, and also more time for ablation. In government works great attention is paid to cleanliness, but no immunity is thereby secured. Other Causes must play a very important part of which no trace has yet been found.

In bringing to a close this part of the subject, it appears, that all Causes leading either to the increased formation of acid, or its accumulation in the blood, or to the suppression of the natural acid secretion from the skin, and all Causes depressing the nervous energy and inducing defective secretion have a powerful influence in starting an attack of graft in subjects already predisposed to the disease.

By the Ancients graft was divided into three Rinds, according to the Seat of the affect: Podagra, Charagra and Gonagra. The classification of modern nosologists that are more worthy of attention are those of D-Cullen and Fordod...
The former divided the disease into four varieties:

1. **Regular Gout** - With a sufficiently strong inflammation continuing for several days, and gradually preceding, with tumours, itching and desquamation of the part.

2. **Altonic** - With an atony of the stomach or other internal part, and either without the expected usual inflammation of the joints, or with only slight or transient pains in them, and often suddenly alternating with dyspepsia, or other symptoms of atony.

3. **Retrospective** - With inflammation of the joints, suddenly preceding, and quickly followed by atony of the stomach or some other internal part.

4. **Improvised** - With inflammation of some internal part, inflammation of the joints either having not preceded, or having preceded, or quickly disappeared. (The above division has been much followed since his time)

Dr. Garrod, with a view to simplifying as far as possible, divides it as follows:

1. **Regular gout** (acute or chronic) Consisting, for the most part, of a peculiar inflammation of the sinuses within and around one or more joints.
2. Irregular Gout. This may be manifested either in severe functional disturbance of any organ, or in the development of inflammation in parts other than those connected with the joints. This last variety includes the various forms classed in the above under the form atomic, rheumatic and misplaced. This division although not free from objection, inasmuch as the irregular manifestations are quite as regular as the articular affection, has the recommendation of being simple.

In an acute attack of gout the patient often continues to rest, imagining himself in good health, when after a few hours, he suddenly awakes with a pain, more or less intense in the ball of the great toe, often accompanied with a slight shivering; the pain in the foot continues to increase and is attended with a sensation of throbbing and burning together with great tension and stiffness. Some heat of skin and other symptoms of febrile disturbance usually follow the shivering together with a considerable degree of restlessness. In the course of a few hours those symptoms somewhat abate, enabling the patient to get a little sleep, and a gentle perspiration usually
issues. On examining the toe, it is found to be swollen, the skin deep red, tense and shining, and the whole joint exquisitely tender; the veins going from the inflamed part are distended, full of blood, and producing slight lividity. During the height of the fit, the pain and sensibility of the affected part is often most intense to such a degree is this the case that the patient can neither bear the weight of the bed clothes, nor even the shaking of the bed from footsteps in the room. It is not always the case that after a few hours of pain, it may so far subside as to enable the patient to have some sleep, for if the attacks be very severe, the symptoms may continue though less intense, till the evening, when they again increase; and the second night is passed in a state of renewed restlessness and suffering, which abates only with the dawn of day.

At the time of the greatest fibrile disturbance, the urine is generally seedy and highly colored, often having a trace of albumin, sometimes muddy in clear, but often giving rise to a dark brown reddish sediment on cooling. The affluence is generally impeded during the severity of the
pain, but after this has subsided it may be as good as in health. First is usually present. When the inflammation is violent, the bowels are for the most part constipated, and the patient is liable to be affected with severe cramps in the muscles of the legs. When the attack is about to terminate, the inflamed part gradually becomes less tense and swollen, sitting is now readily produced, the redness and enlargement of the blood vessels disappear, and after a few days itching of the skin and desquamation of the cuticle ensue; the joint remaining more or less tender for a short time.

The above description refers to the first few attacks of gout in robust and otherwise healthy subjects, and may be taken as the type of acute asthenic gout. Asthenic gout is in its source or pathology the same as asthenic gout, the difference depending on the character of the subject in which it occurs.

These forms of asthenic gout—although at first apparently mild, are ultimately much more hurtful, being prone to assume a permanent condition, and to attended with consequences
Far more injurious than the seven and painful
fits of genuine sthenic gout. Although an attack
of gout comes on very unexpectedly, if watched
very narrowly, it will be found preceded by
the disturbance of some organic function, such
as heat, burn, acidif- and flatulence, oppression
and drowsiness after taking food. hiccups, sneeze
and high-colored urine, but sometimes very large
in quantity and pale. Confused bowels, loss of
appetite.

The seat of the affection is at first the ball
of the great toe. In a list of 516 cases drawn
up by Dr. E. Sendamos, we find that in 341 in-
stances, one or both of the great toes alone were
affected, and the great toe with some other part.
In 373 cases, J. Garrod observes that, in
all the cases that have come under his care,
not more than five percent, were other joints
affected in the exclusion of the big toe. Next
to it being the big toe comes the ankle, after
wards the instep, next the outer side of the foot,
then the inside. There have been various dif-
ferent theories hazarded to explain the cause
of the frequency of gout in the big toe.

Excerpts: (1) Veins little vascular, (2) They are
Most of the head and the \textit{circulation} is at a minimum by subject to the weight of the body, and injury from pressure by &c. &c. afflicting the tissues of the part, for urine just as syphilitic infection selects the face and back chiefly as its seat: Again we know of poisons which act on particular parts.

The implication of numerous joints as the disease advances may be thus explained.

The amount of urine of soda is increased, and requires a greater space for depositing itself.

The pain is also very severe, much more so than that produced by injury. Sometimes it is described as resembling the drawing of the tooth by a dog, the dislocation or the tearing of the joint as under \textit{e}.

There is a distinction drawn by a humorous friend, man, between the pain caused by rheumatism and that of gout. Place your joint in a vice, and screw the vice up until you can endure it no longer, that you may reflexed rheumatism, then give the instrument another twist, and you will obtain a notion of gout.

\textbf{Treatment of Acute Gout.}

It is an opinion not altogether confined to the.
public in general, but some of the opinions of not a few of the profession tend in the same direction, that gout is incurable. The aphorism in which they have uttered their verdict may be stated as follows: Gout alone in case of gout— or in other words, a fit of the disorder is essential to rid the system of the impurities which have led to its production. It is true that among the supporters of this opinion are to be found the names of Sydenham and Allen, who must not be looked upon as mean authorities on the subject.

How modern practice however, has been more fortunate in its results. Gout is quite as susceptible of relief and even cure as any other of the inflammatory affections, by a well regulated judicious treatment. When called upon to prescribe in an early and acute form of the disorder, it is the safest course to follow the rules which apply to the treatment of ordinary inflammation of equal intensity, at the same time always keeping in mind that we are dealing with a disease originating in a peculiar condition of the whole system. Except under peculiar circumstances a strict anti-phlegmic diet should be enforced, and as the appetite
is sometimes keen, this is not at all times easily accomplished. Ample testimony is borne in behalf of this method. In many cases when it is neglected, when few and indiscriminate indulgence in whatever pleases the palate, as far as diet is concerned, is enjoyed, the attacks have been prolonged for many weeks, which under a strict regimen would have passed off in as many weeks days. This notion has arisen as much from a desire to gratify the patient's palate, as from a prevailing sense that it wards against debility, and consequently is secured by such means. That this is clearly a fallacy is at once shown by the fact, that in most patients the digestive powers are awakened, although there be an appetite, and animal food taken at such times, aids materially in increasing the impurity of the blood, and consequently am-"
summarized: for the first few days until the disease has shown a decided inclination to abate, indicated by diminished tension of the skin, mitigation of the pain, and the ready production of pitting, a tongue less coated and the bowels and other excretions free, the patient should be confined to a diet consisting of little more than diluents and farinaceous food. Such would include b rated arrowroot, saqo tabaicoa and the like, with milk, thin gruel, barley or toast, and water, and also weak tea. The drinking freely of diluents is of advantage as it keeps up the action of the skin and kidneys, but stimulating or alcoholic beverages should be strictly forbidden, otherwise the fit will be greatly prolonged. Circumstances may arise when it may be necessary to relax. These however are rare, and it is at all times more advisable to abide by the regular mode of treatment, than to deviate for the sake of merely gratifying the caprice of the patient. When the feeble disturbance has abated, a return to a more nutritious diet may be allowed at the same time adopting the precaution that nothing of an indigestive nature be given. At this stage it is still highly improper to allow stimulants,
If however they be necessary to assist in promoting digestion, a little diluted brandy, hollands or whiskey; or if wine, a little sherry. Distilled spirits always have a preference to wine.

The constitutional treatment should be directed towards the reducing of the inflammation and fibrile disturbance, and the restoration of the blood to a healthy condition. The first of these may be affected by administering purgatives, saline diuretics or diaphoretics. Alter the function of the liver, and purific by giving such remedies as rhubarb with some of the salts of potash and perhaps a little blue pill. It is never advisable to give soda in these cases. Colchicum is considered by many the "somaum remedium" for gout, and a safe medicine when carefully given. Now it acts we do not know. There are very many different opinions as to its mode of action. Some aver that it increases the amount of urine when the amount of urine still remains the same, others deny this theory altogether. Acodymus may be useful. Opium to some extent is contra indicated as it tends to diminish secretion. In such cases we may try aloes, mandrake, caffeine or -

In various cases by blood letting was considered
A very effective remedy in cases of acute gout. It received its sanction from the venerable names of Sydenham and Cullen; in more recent times by Dr. Hamilton, Park, Buchan, and Gardiner. At the present day the profession at large seems tolerably unanimous upon the subject, and consider that it ought only to be resorted to in extreme cases. It has not a curative tendency, consequently cannot be looked upon as a remedy having any specific power. The only possible advantage that can be derived from it is the relief of spilium, which can be more safely effected by other and milder means. It can neither improve the impurity of the blood nor remove the deposit which has taken place in the inflamed tissues. Dr. Garrod states from his own individual experience that he is fully convinced that when blood letting has been carried to an extent to cause subsequent depression, its effect has been to render the attacks more frequent and prolonged, without any advantage in the mitigation of the paroxysm. He says also that he has never abstained more than five or six ounces, frequently even less, and never sufficient to cause the slightest permanent debility.
Local Treatment - In regard to local treatment, this question arises, should the inflamed joints be left to themselves, or should we have recourse to local treatment? From what we know of the marked benefit from local deflection, it is natural to suppose that guilty inflammation would be immediately relieved by leeches. It has been observed that such treatment has been followed by a transference of the inflammation either to some other joint, or to an internal organ.

Viewing the inflammation only as the local manifestation of a morbid condition of the entire system, the comparative insufficiency of local deflection is at once apparent.

Always elevate the affected part, and apply to it both heat and moisture by means of poultices or the warm water dressing. Some recommend the affected limb to be wrapped in cotton wool, but I think the warm water dressing is more serviceable of the two. If great pain, medicate the water dressing by means of Anodynes. After the subsidence of the more acute symptoms and if the swelling and pain still continue you may blister the affected part and often with good results.

Chronic Gout - Gout may be termed Chronic when...
The disease has made an inroad into the Constitution, and its attacks have become frequent. The boundary between acute and chronic gout however, is quite arbitrary. The pain attending the chronic form is less intense than that of the acute, still by the longer duration or almost constant presence of the former, it is able to induce a deplased state of the whole system, and by leading to dislocation and stiffness of the joints, the formation of Chalkstones or Embitter the life of the sufferer. Chronic gout is sometimes confined to one or two joints, sometimes numerous articulations are involved, and not infrequently the disease travels from one joint to another; occasionally it even leaves those parts and attacks other and more important organs. When limited to a few joints the disease is likely to produce permanent local mischief, when it assumes the systemic form, serious effects are more likely to occur. Chronic gout seldom continues in one locality for any length of time without giving rise to some serious and permanent change of Structure. These alterations consist either in the production of partial, or complete ankylosis of the joints, or the formation of the so-called Chalkstones.
- Around the articulations or in other parts of the body, these deposits were formerly erroneously supposed to consist of chalk. Their real consistence varies extremely. Sometimes they are quite soft to the touch, at other times hard. A small white spot is often observed on the heel of the foot of patients suffering from chronic gout. On being punctured with the needle, this is discharged a semisolid cream-like substance. On being placed under the microscope it is found to contain a great number of circular, or needle-like crystals. With these crystals a few blood drops are frequently observed. These white deposits are shown to consist essentially of urate of soda. A small portion of the uric acid is now and then dissolved out, in combination with some potash or lime existing in the tissues, in the form of crystals of these bases, but the amount of these salts is generally insignificant.

Partial or complete ankylosis, which is of rare occurrence in acute gout, frequently supervenes in the chronic forms of the affection. Sometimes there is no bulging or enlargement of the joint; or the appearance of any deposit; at others it is accompanied with a moderate amount of swelling. Often when
The present absence of any deposit a very peculiar and angular form of distortion of some of the phalangeal joints ensues, which affords complete evidence of the nature of the disease producing it. Comparatively few gouty patients become the subjects of visible Chalkstones, at least to any extent or such as to induce deformity. They frequently occur in the far. In size they can not longer than a split pin, often about the size of a pin's head, and now and then a rare speck. A living and convenient illustration of the above may be seen in the case of Scott the porter at the Hospital Gate, who has it in the right arm and finger joints. Gouty bursae are commonly situated upon the heels and feet, but the upper extremities are more usually affected than the lower. The bursae haevector are very liable to become inflamed during an attack of gout, and after the acute inflammation action has passed off, may remain distended. The ridge over the olecranon process is peculiarly prone to be thus distended. The bursae above the knee joints are liable to distension, and permanent enlargement may remain from the deposition of gouty matter.

For an excellent description of the Pathology of...
of Sanguine Gore. Archericin" we must refer to
an admirable work "Medical Observation and Research"
recently published by D. Raycock. The learned Profes-
sor characterizes the external appearances thus—
"blood-vessels largely developed over the malar bones,
and varicose; blood darkly tinted or icteric; skin
oily, yellow from subcutaneous deposit of fat; or
fatty degeneration of the liver; hair thin and
white; teeth numerous, discoloured, covered
with tartar; lips bluish; nose reddish, hypertrophied,
margin of the lacrymoplastic opaque at junction
with sclerotic (the cærus semilis); the abdomen pun-
dulous; limbs thick; joints loose; nodules on
the ends of the fingers, skin of the same fasciae
of muscles and tendons; respiration hurried;
wheezing; pulse intermittent, irregular; stomach
fluctuant; digestion acid; urine loaded with urate.
Temper irritable; mind sometimes enfeebled."

Among workmen accustomed to use their hands in
grasping tools, while deposits are seen on the palmar
surface of the ends of some of the fingers, on account
of the matter which was originally detached, becom-
ing more superficial from constant friction. Sometimes
small nodules of urate of soda are found upon the
sphyline, especially the lower, now and then in the
inflammation of the face.
When pain, instead of passing off in a short time as an acute fit, lingers about the joints, now attacking one, now another, with moderate intensity, but with the production of much stiffness and distortion, it has assumed a form to which the term chronic may be properly applied, and one which requires a considerably modified treatment to that which was recommended for its genuine acute attacks.

A safe and effective remedy in the chronic stage of the disease consists of guaïcum in minute doses, especially when the circulation is languid and the painful parts are relieved by the application of warmth. Cod-liver oil may also be very advantageously employed, especially when the inflammation assumes the form known by the name rheumatic, as it acts on the fibrous tissues, and strongly tends to remove the remains of the inflammation. Other stimulant remedies as morphia and serpentaria may be given either in the form of the simple decoction or infusion, or as the compound decoction of sanaparilla. The next aim must be the removal of the abnormal state of the blood which invariably exists in chronic pain, and to endeavour as far as possible to restore the
Circulatory fluid to a state of purity. The remedies best adapted for this purpose are those which increase the activity of the secreting organs, as also such as possess the power of rendering the presence of urine of soda less injurious by preventing its further deposition in the tissues, or even removing it when already infiltrated. For this purpose alkalies and salines are best adapted.

In the treatment of chronic gout they have long enjoyed a high reputation. The above treatment is favoured by the opinion of Dr. Garrod, who says: 'I am of the opinion that alkaline remedies are of much value and am constantly in the habit of prescribing them, either in the form of bicarbonate of soda or of the carbonate or acetate of the same base. Diptheric poliomyelitis is the soda salts because the former possess the same properties as the latter, and have a great solute power for the uric acid, in addition to which the chemicosis is attacked with advantage.' He further says: 'If a patient suffering from chronic gout is fluent from all active symptoms, the following considerations should guide us:

1) The salines should be given in small doses and repeated two or three times a day.'
(II.) It should be administered in a very dilute form, and always on an empty or nearly empty stomach, and some little while before food.

(III.) The nature of the salines should be depended on the peculiarities of the case, and changed from time to time.

Small doses of saline matter are desirable as they produce no irritation or disturbance of the digestive organs, act more forcibly on the secretions, and are not liable to induce debility. The dissolution of the salines in a large quantity of liquid is also much desiderata, because of itself, as it is of much service as a remedy. The reason why dilute saline solutions should be taken on an empty stomach, is their extreme liability to produce dyspeptic if otherwise administered. Such treatment, however, must not be used without proper discrimination, it would be inadmissible in cases of those who are either greatly advanced in years, or whose kidneys are so injured and contracted that their power of eliminating even the watery portion of the urine has been much impaired, and it cannot be advantageous or understood when the patient's stomach is unable to bear dilute saline solutions. The administering of lithium has also been proved to highly beneficial
Lithia exists in the waters of Carlsbad, in Bohemia, Aix-la-Chapelle, in Prussia, Vichy, in Central France, Ems, in the Duchy of Nassau, etc. Its value depends upon the property which it has of imparting solubility to urine acid. The water of lithia being the most soluble of all waters. The Carbonate of lithia may be given in doses of from one to four grains dissolved in water, and repeated two or three times a day. — As in this form of the disease there is often much want of tone in the stomach, bitters and more especially those which are aromatic, may be either added to the other remedies or administered by themselves. For this purpose, infusions of Chamomile, Calumba, Citrata, quassia, serpentina, cascara, and other like substances are indicated, with the occasional addition of small quantities of the tinctures of ginger or Capsicum, to give a little increased stimulus to the digestive organs.

In connection with the above the Celebrated preparation of Portland Powder is also given, in dosages of equal parts of the following four substances. The dose usually prescribed is one drachm taken every morning fasting, for three months, after which it was reduced to three quarters of a drachm.
for another three months; then to half a drachm for the remainder of the year.

When any of the preparations of iron are required, those should be used, which produce the least possible disturbance of the stomach.

Local Treatment. It was long a popular belief that when chalky deposits appear on the surface of the body, or when the urine was such as has been termed chalky - all - in - currence could be suspected. One of the common sequelae of chalky - if the inflammation has lingered long, in an oedematous state of the limb, and this more especially in the lower extremities, and probably proceeds from the vessels having been much weakened, but occasionally this condition is increased by defective secretion from the kidneys. If the oedema depend on local debility - it is best remedied by the use of elastic stockings, accompanied by gentle friction with some slight stimulating application, as camphorated oil. If stiffness of any part be left as the result of a gout - fit, then friction and passive movement must be had recourse to. This may be most easily done by some simple massage - on - lubricating emulsion, or one made somewhat irritating by means
of Ammonia or an essential oil as of Carpent-
Re; and occasionally small blisters are of much
advantage under these circumstances. The
use of mechanical appliances must be made
with caution, for much injury may be induced by
a too harsh mode of procedure. Gratt's means
are at all times likely to prove most successful.
In some circumstances the use of mineral baths
is of very considerable importance.

In chronic foot the rigid diet, so necessary
in the acute paroxysms must be replaced by one
capable of supporting the strength of the patient,
but as all which exceeds this is productive
of injury; there is no little difficulty in strictly
adhering to it. The quantity of animal food
must be considerably limited. Mutton and
fish may be used but never pork. The time for
taking food must also be regulated; dinner
should be taken about midday, and late
suppers are strongly objectionable. Wine or
malt liquors should not be used allowed;
if alcohol be requisite in any form, none
may be had to weak Whisky or Brandy. Tea
and Coffee should be taken in moderation, and
not too strong; if they cause indigestion, avoid
May be substituted. Exercise is most important in youth, as inactivity tends powerfully to engender a state of system leading to its annihilation in all cases proportioned to the age and strength of the patient. In patients of weak habits, an elevated bearing and peculiar advantages. Changes in warmer climates have been found beneficial, where the attacks depend on the state of the skin, and are readily excited by cold winds. The mind of the patient ought to be a subject in less than the body. Late hours should be shunned, sleep and the cares of business laid aside, and the mind employed with pleasant thoughts and occupations.

I have now drawn my lessons in this department to a close, not that the subject is exhausted or dealt with as its importance deserves. I have confined my investigations to the bare statement of facts, dealing with it in the most practical manner possible. There is no attempt at originality, my aim has been to set forth a general outline of the history and treatment.
Of the Disease, in harmony with the best treatise on the subject. My apology for choosing gout as a subject of these— a subject— which happily forms a small part of an ordinary practice, is, that it is not uncommon in the part of the Country to which I belong (S. Wales) besides, unfortunately, it has every chance of descending to her, if spared, as an heirloom. under those circumstances in which I am individually concerned.

I had say no more in behalf of my choice. If I have understood my subject and spoken judiciously, it will amply repay my pain and the trouble I have spent on it.