A Thesis
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The subject chosen is one of great natural difficulty and complexity. It is a subject which on perusal of medical literature does not appear to have received due attention, owing probably to the nature of it, the difficulties connected and inseparably associated, and entwined in a manner, that are very stubborn to deal with, unless an insight be looked for in localities where the pupilium for work affords to reflection and where the proper material is at hand, the medical practitioner does not appear to indulge in the method of committing to paper, what he has observed, lest he should be confronted.

Any young practitioner, a tyro to the condition, and it may be said, matured practitioner, who come into a locality, where there is a prevalence of follicular vesicle formation, with its stages of efflorescent membranous formation in the throat and its varieties, will without hesitation call the condition one of diphtheria, which is not genuine—
diphtheria, but a subordinate condition,
leading by stages and devastations with its
resultants, to the development of diphtheritic
membranous formation.

The subject of discourse which I have
chosen, is, follicular vesicle formation
in the throat and their adnexa, with
subsequent efflorescent membranous for-
mation leading up to diphtheritic mem-
branous formation, and to lucidly describe
how from the first-named, it can advance
to a formidable and appalling matter, and
to vividly show how a minor condition is
mistaken or at least is called from want
of a little discrimination, or from fear of
a contagious disease, or from a careless
examination is called diphtheria, when
such is not the genuine article. Although
the efflorescent membranous condition of
the throat may be viewed as a much-
modified diphtheria, just as much as
varicella is viewed as a modified variola.

Granted this to be the case, the con-
stitutional disturbance in the way of pyrexia
are about the same, but the effect of one
on the human system and of the other,
are totally different. The former
of the two is never a deadly disease,
provided proper medical aid is sought-
for and applied. While the latter of the two too frequently proves fatal to our sad experience and recollection of past reminiscences. Then it is considered that— that life might have been saved, if the guardians or those answerable for the health of the affected had made up their minds to call your earlier, and not have waited, until the gravity of the disease was too painfully evident to those in whose presence the disease was rapidly playing its destruction of human energy and vitality.

Again from the close approach of the efflorescent to the diphtheritic membrane, it is often a matter of very great difficulty to decide which of the two prevails before the application of treatment. And a practitioner, who does not minutely survey the membrane, will sooner or later fall into an error, which he will have cause to be sorry for, when it is too late. Mistakes in diagnosis have arisen in this way—he thinks that he is too sure of his diagnosis and infallible, and does not with sufficient care explore the part. Probably the light did not properly fall upon it, reducing a false appearance and as
a result a false conception will a serious mistake, if the graver form of disease is not recognized. From a large experience and a practice that is large, he being hard pressed for time, a hasty glance is taken and invariably is productive of a false notion. Yet again some do not even take the trouble to clearly appreciate the existing condition and call all membraneous formations alike - diphtheria, which is erroneous and an unpardonable error. Whereas, if their talent was applied to the subject, then comparing their notes, mental or written, sooner or later, they would begin to doubt and to consider, that there must be different that they cannot be the same, because one produces at all times great constitutional disturbances. The other does sometimes and sometimes not, depending upon the stage of advancement and period of time that has elapsed from the commencement. In the graver form of disease of the two, it takes but a few hours to show what is the matter. While in the efflorescent condition it takes days, sometimes as many as fourteen days elapse prior to the patient seeking aid, if we can
rely on their statements. Judging from the subjective symptoms and the patient's notice of what has been progressing in the throat, for as many as ten and even fourteen days in one case, have elapsed at the expiration of this period, there may or may not be constitutional disturbance. The patient—be a boy or a girl will be running about as usual if a youth or an adult, they will be following their vocation, suffering only the inconvenience in the throat, which in time determines their application for relief. Now, if the case had been one of diphtheria, the child, boy or girl, youth or adult would in each case only be too glad to take to their beds from the constitutional effects the malady was exerting on their system. The constitutional effects would be so apparent to those about the patient, without expressing on his or her part to crave for sympathy. If the condition had been one of efflorescent, membranous throat, there would be only the disagreeable awareness of the throat, unless pyrexia was associated or accompanying it, and little or no embarrassment of the respiratory act, thus making a striking
difference between the two. Moreover a case of diphtheria in the throat could not last ten days without treatment. Efflorescence in the throat could and would certainly be cured then, when treatment was employed. Thus marking a still greater difference, namely, death in the former disease, before the number of days quoted could elapse, and a cure would certainly be established in the latter.

Another element—well worthy of consideration, not from a medical point of view, but from the inconvenience our patients relatives and friends are subjected to, that is, the one arising from the incapability to differentiate between the efflorescent and diphtheritic throat. A matter of serious import from more than one point, and it is a fact, my earnest desire is to imprint. First, there is the alarm and consterna-
tion raised in the mind of the patient, at the thought of such a dreadful disease. It gives them a shock, that takes a considerable time to be resus-
citated from, especially if they have had a fatal case in the family, or some of the relatives or neighbours
have had. Second, there is the inconvenience arising from it—which exhibits itself in many ways—the removal for the sake of isolation of the patient to the top of the house; the removal of all unnecessary furniture; the constant use of antiseptic precautions and their annoyance, which in many cases people positively avoid. The smell of the antiseptic has done them harm, inducing some ailment or other. (This remark is not intended to apply to the patient, but the other inmates of that house); the requisition of the services of a special nurse; the prohibition of sale of food or milk, if such be in part of the house, where the illness prevails, to the detriment—and loss of remuneration of the parents: This alone in some instances is a serious item; and last you are cut off from all communication with your neighbours, friends, and children are kept at home who attend a day school. Also you are met with reproach from others as though you were a leper, and should you desire anyone to visit you an hour or so to console or cheer you up, this also is disallowed. Thereby subjecting
a punishment— that is unwarrantable in every respect and is palpable culpability. Third, there are the effects and influence on the medical officer of health for the borough a matter of no small consideration for him and likewise the taxpayers. The effect is, that it causes him alarm and consternation, when the idea of diarrhoea is said to be on the alert. The influence would be, that it causes him to project measures in the endeavour to compete with the idea. These measures likewise are unwarrantable. It causes him to produce reports of what did not exist; it causes the sanitary committee to question the health of the district; especially, if a fresh medical officer has been introduced into the district, his last would be looked upon as inferior. An opinion thus formed, would almost amount to damage of personal character and of reputation. A matter of grave import for the medical officer, if the damage should arise through no fault on his part, but from want of a better recognition of the prevailing disease. For a further solution of the apopem, I would refer the peruser to a careful consideration of the
appended descriptions and the attached pathology - of each. Because the morbid condition, exhibiting itself in one part - in its initial stage, does not exist alike in all, but one leads up to the other; all contributing a part - in the elucidation of the various stages, connected with the det - of throwing light - on any obscure subject. Therefore to study the follicular tonsillitis, it does not exhibit the prominent vascular structures, as in that of the pharyngeal palate or uvula, nor does the tonsil - a wheel-like or amphitheatre arrangement, where the parts are terraced, such as is well defined on the palate, with its central part, intermediate and well-marked peripheral parts. And this leading up to a state of affairs, which partly helped in the clearing up of the pathological changes in efflorescence. Under the same heading will be found a short discussion of malarial, mephitic and miasmatic elements, progressing to induces changes in the albuminoid molecules of the blood, alteration of their constituents, arrangement of the nervous system, and other organs as a matter of result.
efflorescent-membrane formations are produced, from the poisonous products and the resulting fermentative changes, acting in the systemic system.

Also are appended a few cases of a complex nature; and of one where diphtheria did supervene on efflorescence with a fatal result. And of an unusual scarlational rash, recurring in two patients suffering from scarlet-fever, followed by a second complete desquamation, which was caused by the super-addition of an efflorescence during the scarlet-fever, and mention is made at the same time of re-recurrence in other cases of the scarlatin-al rash—during the course of the fever through the super-addition of efflorescence around various joints.

This thesis is original throughout and no individual, medical or otherwise, or medical work, have contributed anything in the way of explanation or in accomplishment of the subject. The few irregular and rare cases appended may in time help to clear up the way in further explanation of the disease and its connecting links with diphtheria, if it already does not achieve it—and the results that may accrue. The general—
description is based upon the number of cases. The pathology is the result of observation and the sciences brought to bear upon it.

Follicular Inflammation.
The term follicular does not imply and is not meant to imply that the follicles are the structures solely affected, but that a condition may arise similar to that where follicles are involved. The term is meant to convey an idea of condition that is capable of comprehension, namely that it is a little bag-like structure or structures independent of each other with its hereinafter mentioned changes, projecting beyond the surface of the mucous membrane upon which it is situated. Hence it would not be inappropriate to term it a follicular eminence or eminences according to determining circumstances. The position of the follicular structure is by far the commonest on the lorn, and on this account is its priority of description to those subsequently enumerated, and the same principal, with the others, has been observed throughout.
Simple a Single Follicular Tonsillitis.

This is a condition in which there is a single follicle formation, affecting the right or left, each with equal frequency, and more rarely both, though only one appears on each tonsil. And, as this condition is so extremely mild and single I have termed it—simple as also, to separate it from a multiple condition to be described later on. The follicular eminence is usually located on or about the centre of the enlarged tonsil, undergoing a process of inflammatory action. This is what occurs in the majority of cases where only a single follicle is present. Occasionally it may be seen at other parts on the surface of the tonsil, but then as a rarity, if only one follicle, unless it is subsequent to an attack of efflorescent membranous formation; also, it may be seen on the surface of the mucous membrane of the tonsil, a condition to be explained hereafter. The follicle under such circumstances usually appears at the part which was the periphery of the efflorescent membranous formation, most commonly on what was its imaginary superior border or on what was its imaginary anterior border, and in no instance
have I met with it—on what was the imaginary inferior or posterior borders, in the case of a single follicular formation. Although it is quite possible that it is met with, on the last-mentioned imaginary borders, but such must be very rare, without—i.e., a multiple follicular formation which will be considered under that heading. The symptoms, if any at all are present, are only a soreness in the throat, on phonation or on mastication, beyond this other symptoms do not exist, provided the thyroid be not inflamed or enlarged.

Sometimes the follicular exhibition is the prodromal sign of an acute attack of rheumatic arthritis, perhaps it is peculiar to this neighbourhood, for which refer to etiology. It is a prodromal, that is worthy of their knowledge, and to it, as a prelude to the reading of a constitutional susceptibility of the patient to a rheumatic development. Often have I thwarted an acute attack of rheumatism, by warning the patients beforehand, that, if they felt any pains in any joint—continuing to immediately confine themselves to bed and lay in blankets. This timely precaution alone avoids further exposure, further development in the system of products, which are probably allir in
during pulmonary changes into a rheumatic poison, and it will save the patient from acute, exacerbating and exquisite pain. Thus viewed, what—looks a simple thing, readily amenable to treatment, after all it is not as simple as it looks, but the forerunner of a serious and formidable disease capable of leaving disastrous effects behind, irreparable by drugs, rest—treatment, or any skill whatsoever. After rheumatic arthritis the patient’s cardiac organ is in the greater majority of cases irreparably damaged for the remainder of his or her life; always to suffer these inconveniences, and sooner or later to be a martia to the disease or the symptoms of developing disease, finally to culminate in death. This is a state that can be avoided and is well worthy of the knowledge, if it be only the means of saving but a few patients during a lifetime. There are also many other after—results of rheumatism, which are apt to supervene and it would be presumption for me to describe or to mention in a lecture like this.

It is most commonly met with in adults, more rarely in youth, and as a rarity in children and infants. It—
affects either sex impartially and with an equal share or proportion.

The pathology of simple follicular tonsillitis is, an inflammatory action going on in the tonsil, with consequent enlargement and marked reddening of the mucus membrane covering it, and the production of a follicle. The follicular development at first is a little raised and like a papule presenting a rounded protuberance, shortly to present itself by passing through the mucus membrane, exhibiting a minute vesicle of a transparent character. The membrane of the vesicle is transparent; the sac appears to contain a clear glistening fluid, the long to be changed to a milky appearance, and if the inflammatory action in the submucous tissue be acute, according to the acuteness, will the vesicle contain pus cells, leukocytes, and even red blood corpuscles, and an varying amount of plastic material, as is displayed, when the vesicle bursts. The follicular eminence subsides on its summit, but by far the most, laterally, in a centrifugal manner, gradually advancing step by step, more especially when other follicular formations cooperate and work in concert to form a condition subsequently to be described as efflorescence.
The colour of the follicle will vary according to the severity of the inflammatory action, and the stage of advancement, from a clear to a white or milky colour, then of a creamy colour to a very bright red. The usual colour after rupture in a mild form is white with a faint tinge of yellow, that is to state, of a cream-like colour, and when the inflammatory action continues to be mild, the follicle may become lutenised and even lenaceous in some cases. The summit always remaining in the centre. Then appearance under such circumstances is that of an elegant carving. This idea is promulgated from the solitary follicle and its pert semblance.

Surveying the follicular tonsillitis as a pernicious symptom of acute rheumatism in the joints, which is my belief, when it is associated with acute or sub-acute inflammation of the tonsil or an exacerbation suddenly super-added to the chronic or subacute tonsillitis, that it is, a morbid condition of the blood, in a mild form, capable of modification, or of being arrested in the progress of it or of being eliminated during the progress, under treatment. Only it shows itself on the tonsil, just as Varicella and Variola do
on the skin. The different situation of the follicle renders it more favourable for a plastic exudation, than it does the varicella or variola on the skin. Although aware that varicella and variola show signs of their existence on the mucous membrane of the throat, yet not in the same fashion as does the follicle formation. It resembles varicella in one respect, and variola in another. Thus it resembles varicella in a small papule or bump-like formation, early to be surmounted by a vesicle formation, differing mostly in point of size. Yet it differs from varicella in acute cases of follicle formation; the follicles contain leucocytes and even multi-nucleated white cells, and still more in the plastic and fibrous exudation. It resembles variola thus, in the various stages of formation, with the ultimate one of pus cell formation, but differing from it in size, the less constitutional disturbance set up, with its non-association of exhaustion of vitality. In variola the various stages of pus cell formation have a definite period in follicular formation the various stages are too rapid for accurate differentiation. Thus constituting a similarity and yet a dissimilarity in the two distinct diseases.
To sum up and differentiate the ordinary pathological changes in an ordinary case in its various stages of development, it would be exhibited thus:

(a). It consists in a papule formation beneath the mucus membrane on the tonsil, undergoing a process of inflammatory action.

(b). The passage of the papule through the mucus membrane, caused by the thinning of the mucus membrane, in direct ratio proportionate to the enlarging in the tonsillar tissue.

(c). The summit of the papule is early surmounted by a vesicle, containing a fluid within a transparent membrane. The colour and quality of the contents vary with the acuteness of the inflammatory action and the rapidity of the process:—

if more acute than the foregoing mentioned, the vesicle will contain leucocytes; still more acute, the vesicle will contain in some instances in addition, multi-nucleated white cells with definite outline and plastic material, and still acuter, the vesicle will contain in addition to the last-mentioned, red blood corpuscles and more plastic material, producing a larger vesicle, almost the colour of the inflamed mucus membrane.
(5). After rupture of vesicle, the plastic material congeals, and begins to spread centrifugally. Its (i.e., the forced out material) colour varying from a very faint white to creamy, or red to pink according as the red blood corpuscles are altered or not—by position or by the continued inflammatory action.

Results in an extremely insidious chronic inflammatory development—of the tonsil.

Etiology in this and subsequent conditions, refers to efflorescence. Also the same for treatment.

Simple Follicular Pharyngitis.

The term—simple (or single) follicular—has a similar application to that—in single follicular tonsillitis. Pharyngitis implies inflammatory action of the mucous membrane and submucous tissues in the pharyngeal wall. As this condition of single follicle formation is second in place of occurrence to follicular tonsillitis, it is thus considered in its position of frequency. It is rare as a condition when no other part—in the immediate—
vicinity is involved. It does exist — and in a varied form, as will be discussed in this treatise, before simple pharyngeal conditions are disposed of. Undoubtedly it is generally overlooked, as its position is directly concealed, by the interposition of the uvula or the soft palate being more pendant — than usual, between you and the object you earnestly desire to see. Ask the patient to take a deep inspiration, the soft palate and the uvula are elevated thereby, a better aspect is permitted and the condition rendered visible. The patient complains of a fulness, an obstruction which must be slight — and in a great measure imaginary, because the follicle is so small and cannot offer much, if any, hindrance to the respiratory act; and a soreness in the throat high up and at the back, as they describe it, when they cough, or during the act of deglutition, more marked when the patient blow their nose, and still more during the act of sneezing. The latter act is sometimes brought about by a tickling sensation, which is induced by the existence of a foreign body, namely, a follicle — in the pharynx. The act may
be elicited and better illustrated, if an
esthete be administered and a stimulant
induced. The patient then complains of
a soreness of a greater degree in comparison
to a soreness.

Simple follicular pharyngitis is met with
from the period of adolescence onward. The
reason why it is not met with in the
younger patients may be accounted for in
several ways, namely, the inability owing
to the earlier period of life to detach what
troubles, and its difficulty to locate where
the place is, that is, the source of
annoyance and trouble, and the difficulty
to persuade a child to make an inspiratory
deep breath, to elevate the soft-
 palate, to expose a part high up and-
 concealed, especially when you are
using a tongue depressor to facilitate
and to aid you in your diagnosis. The
child and it may be stated young people
in general are timid and nervous about
any examination, that appertains to the
mouth or throat. The inference to be
drawn is, children and youths are not
suitable subjects for examination for this
condition from the alleged reasons, but
have the consolation of the adult to help
us in our scientific medical investigation.
to utilize clinical facts for the guidance of others. I have met with twenty-seven cases affecting the upper third of the pharynx laterally placed, equally frequent on both sides, and none centrally placed or medially placed. In the middle third, three cases only, two on right side and one on the left, also laterally placed. And only one in the lower third, and that on the right-lateral half, just a little above the level of the summit of the epiglottis — when it is in its erect posture. These are all in single conditions and not in multiple conditions.

The pathological changes are the same as in follicular tonsillitis. From the apparent comparative infrequency of occurrence of this condition in such an out-of-the-way place and its concealment, I have been unable personally to see the various stages of vesicle formation but believe they are undoubtedly the same, that is, papule formation, the process of evolution, the vesicle products, the alteration of contents, with the lesion of continuity and its consequent centripetal spreading, though the pointed but small contents as is the case, in the observed follicular tonsillitis. But
have noticed another element concerned more than, when the follicle occurred on the tonsil; that is, the blood vessels dilate in the majority of cases not in all, and become of a deeper purple colour than normal, which are running to or from the follicle in the pharynx. The mucus membrane is much more angry looking than on the tonsil. There is a greater abundance of secretion of a thick mucus-like character expectorated, brought out with a cough and with apparently little effort; its character is that of ordinarily clear mucus, without odour, resembling glycerine, only much thicker in consistency.

It results in chronic inflammatory development and a disagreeable tickling sensation in the throat; sometimes in a constant sensation of heat; sometimes in a continued sense of dryness experienced in the pharynx; and sometimes and perhaps the most frequently in relaxation of the pharyngeal mucus membrane. The last-stated fact is applied to the upper part of the pharynx only. In no instance has a case of arthralgia come under my observance, either during or subsequent to an attack of simple follicular pharyngitis.
Simple Follicular Hemorrhagic Pharyngitis

Is a condition in which the subjective symptoms of soreness in the throat are better defined, and in which the inflammatory action is more acute from the commencement. Blood is poured out almost pari passu with the inflammatory stage of development. In the majority of cases, the amount poured out is small and the vesicle formation likewise is small, producing a vesicle about one and a half times the size of the tonsillar one, not the same colour, but of a bright red, resembling in all respects, as far as discernment with the eye, the resemblance in colour and in character to that of the inflamed pharyngeal mucous membrane. Under such circumstances, if not most carefully examined, it is overlooked and mistaken for true glandular enlargement, in a state of inflammation. Sometimes the blood in these vesicles exhibits itself, as a small black congealed mass, which is easier of distinction from the foregoing, and not so liable to be overlooked, as it presents a small black
spot, that attracts further attention. Once on your guard for these two varieties and aware of their position, you are prepared for their reception, and an eye, observing a small elevation, fixes so intently on the object, that it forms a true impression, perceives the condition, colour and then reflexly influenced by the sensorial ascendant power, more closely scrutinizes the actual condition. Thence deriving from its acute survey—a true picture, in short a draught with its outlines of definition an existing condition impressed so thoroughly that at a future period it would be impossible, during a careful examination, to overlook it. This was the vesicle, that first put me on my guard to look out for blood corpuscles in the follicles on the tongue, which with patience and perseverance was crowned with the discovery in other follicular formations in different parts. It was this that reduced the idea of how the colour in the efflorescent membranous formation was produced, what from, and of how its colour altered from time to time in its various shades, and of what the colour was dependent, matters of valuable import, leading to rapid progress and discovery, which at first were viewed
with serious apprehension and held in reserve as the keystone to the promulgation of scientific knowledge in the proper path. In one case a peculiar and striking phenomenon was produced, where a hemorhagic bulla formed, about the size of a three-penny piece. The bulla ruptured in the evening time; the patient expectorated a dark clot of blood, which was forced out of its bulla by hawking and coughing. This achieved, the patient was practically well again.

In most of the cases it was stated there existed insalubrious defects about the house, but why this should produce a hemorhagic vesicle formation, is a question, at present, apparently unanswerable.

Some of the vesicle formations, seven out of seventeen cases were associated with functional derangement in the direction of amenorrhoea. Out of the seventeen, twelve were females and five were males. The fact of the functional derangement is mentioned, while no connection being direct or indirect, could be traced to the catamenia anterior to the hemorhagic vesicle formation or subsequent to it.

The sanguineous exudation is so palpable that the merest tyro could not overlook it.
provided he displayed ordinary ability in connection with thorough examination.

The pathological changes are nearly the same as in simple follicular pharyngitis, only the inflammatory action is more acute, the vessels more prominent—consequently the blood is poured out into the vesicle, which congeals, more or less, and gives no further trouble, after the blood is cast out. No hemorrhage follows the rupture of the vesicle, and no undue symptoms from the expulsion of the vesicular contents.

Etiology and treatment—refer to efflorescence.

Recurrent Hemorrhagic Follicular Pharyngitis

Here there was a repetition of the—follicular development, not on the same day, but on different days, and in no instance during an examination did two follicles exist in the pharynx at one and the same time. From the infrequency of this, and from its concealed situation, I have briefly described three cases, such that a better definition might be conveyed with succinctness. The inflammatory action appears to be about the same as in the former cases of pharyngitis. That is, in the simple hemorrhagic follicular
form, and it did not determine the amount of blood poured out; in each case, nor did a small vesicle containing blood, nor yet in the same case during the recurrent period, because sometimes it was not one kind of what another would be in the following day; nor did a small vesicle determine the formation of a large vesicle on a following occasion nor vice versa. The subjective symptoms in each case were about the same in spite of the different sized vesicles, and as a matter of course the objective sign was about the same in all, differing only in point of size and shape, if any, of vesicle. The shape and size of the vesicle or bulba respectively did not modify the mould for the clot of blood but the clot moulded the shape of the vesicle; sometimes it was prominent and pedunculated pressing the appearance represented by a bud at the neck; sometimes it was flat and button-shaped; sometimes pyriform; and sometimes globular. Hence it would be presumptuous to state the shape of the vesicle as it varied in the same patient with the repetition of recurrence.

The various stages of pathological evolution are the same as in simple hemochorial follicular pharyngitis, but are rapid and often advance from the primary stage to the ultimate one.
before seen.

Have met with this peculiar condition in five cases. In two of them it lasted three days, will no relapse, and in another three days, followed with an intermission and a relapse on three different occasions; in another for five days with an intermission and a relapse; and in another for nine days with an intermission and a relapse on the seventh day, and again on the third day after. From this it will be inferred that a relapse appears to be frequent and not at all unusual, if you can judge from so few cases; however time will permit of other practitioners to confirm the statements.

For a matter of convenience and interest to the peruser, I have described three of the cases, which practically includes the whole five, and from the regularity of the three cases it puts on the guard of the possibility of a relapse and the probability of another to succeed prior to the patient being free. All five cases were female domestics. The size of the hemorrhagic vesicle as previously stated varied up to the size of a threepenny piece; it varied in the same patient. The subjective symptoms were the same as in simple follicular pharyngitis, while the objective was more prominent and looked
like a cavernous angiona, with the color
of the blood clearly showing through the
membrane. The peculiarity—generally in the
recent cases was, that the hemorrhage
and the vesicle formation occurred after
retiring to rest and usually ruptured during
the course of the following day, though not
always. The rupture was probably aided in
the daytime by the bustling about—of the
patient—and other concomitants—such as
hawking and coughing.

Here are three of the cases:

Case 1. A female domestic aged twenty-three
years, with no hereditary taint of sort—
phthisis, nor hemorrhagic diathesis. The
hemorrhagic vesicle formation occurred on each
night—after retiring to rest—in a different
vesicle, situated laterally on the second night
next to the primary one and on the right side on
the third night. During the daytime, the
contents of the vesicle were discharged—
through a lesion of continuity—aided by
hawking and coughing. But why, as in
the other cases, the domestic should retire
at bed-time, apparently quite free from
a follicular pharyngitis, was a fact—that
could not be elucidated. There was no
causal condition, except the insalubrious
sanitary defects at base of the house, nor
Anything in the physique nor the habit of the patient, that in any manner could be attributed to it. Why the haemorrhagic follicular development occurred on three successive nights, and during the daytime as a result pharyngorrhagia of blood in a congealed form. Then an intermission of three days, and a relapse as before, for two days more, following this, another intermission of two days, and a further relapse for four consecutive days. During the period of fourteen months there has been neither any inconvenience as a result nor any symptoms of return in this patient.

The symptoms complained of at the time, were: - a soreness in throat, and an impediment to nasal respiration.

Case 2. This also was a female domestic, aged twenty years, whose paternal side suffered from gout. No history of hereditary haemorrhagic diathesis. The patient was of strong build with a healthy aspect. The case resembled the other in all respects, except, the haemorrhagic vesicles were less and all confined to the left pharyngeal wall in its upper concealed part, with its nocturnal hemorrhagic effusion and diurnal pharyngorrhagia of blood in a congealed form. It was the sense of rawness in the throat and impediment to nasal respiration, that attracted
attention, and the reason why advice was sought by the patient as in the foregoing case. The
aullation of haemorrhagic vesicle formation and
of pharyngorhagia continued for five days,
and an intermission of three days followed,
to be marked by another relapse lasting three
days, and on each occasion the vesicle was
larger than they were before the intermission.
Observe the same and in about the same
position. There has been no return for five
and a half months, neither of symptoms or
other conditions connected with the throat.

Case 3. Another female domestic, with no
hereditary faulty, rheumatic or haemorrhagic
diathesis, but hereditary phthisis. Aged
twenty-one years. This case differed from the
two former in length of period of duration,
and in length of period of intermission prior
to relapse and another circumstance mentioned
in the context. For the first two nights, there
was the vesicle formation with its characteristic
haemorrhagic effusion, nocturnally, and the
pharyngorhagia of blood in a congealed
form on each successive day. Now on the
afternoon of the third day before retiring to
rest, the patient felt a sudden soreness in
the upper part of his pharynx on the left side
and a consequent impediment to respiration

Through her nose; in fact of this she did not present herself until the following morning as usual, when a large sanguineous vesicle, flat and button-shaped, larger than a three-penny piece was visible on deep inspiration. This remained for three days and nights with no appreciable alteration of shape or in colour of contents of the vesicle. In the afternoon subsequent to the above stated time, a sudden unprovoked stimulant—caused lesion of continuity—and a consequent expulsion through the mouth with a little effort, of a dark clot, blood, button-shaped of the size already mentioned and about one-eight of an inch in thickness.

On examination of the upper part of the pharynx, a thin paper-like plum-coloured membrane remained, which disappeared the following day, leaving to my disappointment, no trace of its position behind. I did contemplate the finding of a raw surface, however, only to be disappointed.

Below the position of this membrane, still on the left side, close to where the posterior pillar of the fauces join the soft palate, was another sanguineous vesicle of small size, which ruptured, discharged its contents and disappeared during the following day; and another by the side of it—formed on the same night, also of small size; it remained for two days and then disappeared as usual. During the
afternoon, as the last burst in the morning a
another vesicle of small size formed on the
right side, which burst the same evening
and its contents, spilt out as fluid blood, it
continued to bleed very slightly for thirty
five minutes, as stated by the patient. Now
for a period of seven days, the intermission
was protracted. All the disagreeable sensation
of Coughing in the throat was lost, and the
patient appeared to be in as good health as
usual, going about her work and did not
suffer any impediment to nasal respirations.
On the seventh day, from the last formation,
in the afternoon, whilst proceeding with her
work, she noticed a soreness in the upper
part of the pharynx on the right side, soon
followed by a raunners and impediment to
nasal respirations. This ruptured the following
day and again she appeared alright, except
the mucus membrane was red and angry
looking. An intermission for three days
more ensued, when again in the afternoon
this time another vesicle on right side of small
size formed, and ruptured the following night.
In seven months there has been no relapse.
In some instances after rupture of vesicle, the
vesicular wall remained one or two days, then
disappeared somehow, thus enabling me to make
a certainty, that it was not the same vesicle—
remaining. It did in one instance remain longer as stated, but no other vesicle formed while one was present.

Etiology and treatment refer to efflorescence.

Simple Follicular Uvulitis.
The follicular development occurs on the right or left lateral aspect of the uvula. It occurs either close to the juncture of the uvula with the soft palate, or in the middle of the distal half of the organ. In no instance have I met with it as a simple condition on its anterior and posterior aspects, but as a multiple condition in association with other affected parts in the throat. Arthritis pains and sometimes rheumatic arthritis develop as a result of the follicular uvulitis. One case is now vividly before my mind's-eye, where after the uvulitis and the follicular condition, the patient four days afterwards was the victim of an attack of rheumatic fever, from which she recovered; six months after this, the follicular condition developed and again in five days she was laid up with acute rheumatism.

The subjective symptoms are very slight. The patient complains of a soreness in the throat, which he or she is made cognizant of, by any circumstance that operates on
The inflammatory mucous membrane of the throat, such as, talking, breathing, possibly, coughing, sneezing, or during the act of deglutition, respectively. The amount of pain varies with the idiosyncrasy of the patient, and also in direct ratio proportionate in each act, accordingly as the strain or the pressure or the pressures are brought directly to bear upon the part. Another element provocative of increased discomfort or annoyance is the smoke or the fumes from a hot fire, especially the last named, that appear to irritate and to increase the inflammatory action, more than in any other simple follicular condition existing in the throat. Also, another potent element, not to be forgotten nor yet overlooked, is tobacco smoke, when it produces a sense of heat in the part and sometimes a burning sensation is experienced, developing at times into an intolerable pricking, tingling or burning sensation, especially where a short stem of a well-seasoned pipe is used in conjunction with hot or strong tobacco, or where owing to the damp and compact nature of the tobacco, necessitates a greater suction power, putting a greater strain on the already inflamed ovalar mucous membrane. The effect produced from the indulgence in cigars and cigarettes is not to be ignored,
unless they contain powerful narcotics, like opium, whose influence through its vital annuls or deadens the peripheral terminations of the sensory nerves of the throat, in addition to the general peripheral cutaneous sensation. The inflammatory state of the uvula is at the same time made worse, though the patient may still be unaware of it—that, it is more inflamed; that the state of the patient is—rendered more neurotic, as the sedative—effect passes away; and that the state of the uvula from the increased excited—inflammatory action is more enlarged. And most probably the patient, under such circumstances, is painfully aware of his depression in secret, as the pain is now greatly aggravated. The patient also suffers from a short-hacking cough.

It occurs chiefly in adults, affecting—male or female equally. The upper part of the uvula on its lateral aspects is the most—frequent-seat of the condition. I have met—with it in two instances in babies, one seven—months of age and the other thirteen months. In one instance, that is, the former, the parents—lived at a place, which was originally marshy—ground, and in the latter instance a well is—beneath the kitchen floor, and it is not far—from the river. The water of which influences
That of the well, which is not in use, owing to it having been condemned as unfit for domestic use. Seldom is the condition met with in the youth and then it is often associated with a simple follicular tonsillitis or a tubercular diathesis.

Pathology:- The various stages of evolution and transformation in the simple follicular development here, are the same as on the tonsil and on the pharynx, only much more definite, better marked and the process of evolution not so rapid. Thereby suffering a fine view and chance of observation how this condition is transmutable during its progression from a submucous to an epithelial situation. It is a paragon exhibiting specifically its opionic character, thus, it was in this locality, that my appreciation of the rapid transmogrification from the papule to the follicular development was confined. It made me more elated and more certain, that my diagnosis of the various processes on the tonsil were correct and were due to frequent and unremitting search for the initial and subsequent stages, consequent upon the morbid influence. The papule formation and the thinning of the circular mucus membrane over it lasted about one day, and another day would see the vesicle produced in full splendour, like
a small bag, projecting directly outwards, not
to become pendant similar to other pedunculated
structures, but to retain its erect posture. The
transudation into the vesicle at first is clear
and bright, almost transparent, gradually
changing into an opaque fluid; the opacity
is due to leucocytes and a transformation in
the exuded fluid, and in some instances to
pur cells. In no case have I met with red
blood corpuscles in the vesicle in this locality,
although the inflammatory action be very acute;
no have I seen blood vessels ramifying in the
mucous membrane upon it, to supply the vesicle
or the part implicated by the inflammatory
process. The reason, why the pedunculated
vesicle is erect, is due to tension within it
from the presence of exuded fluid. This
gradually advancing step by step until rupture
is inevitable, and then the stage of progression
and the resulting appearance are the same as
in follicular conditions elsewhere in the throat.
Red blood corpuscles are poured out after
leision of continuity of vesicular wall has
occurred. This is a result of the pressure
caroused by the papule formation in the loose
areolar circular tissue, acting in concert with
the rapid relief of tension, through escape of
contents from the vesicle and the relief of
tension within the papule, which at this
stage soon disappears. The two last-named conditions acting almost at the same time and in conjunction with each other on the already-impaired vitality of the similar tissue around the papule in the immediate neighborhood to terminate in the permeance of minute capillary vessels in the substance of the organ, giving way or a semi-necrosis with a partial circumferential giving way to advance to completing the long of the said tissue and hemie structures, to result in the formation of a small slough or a minute patch or a large patch, according to the extent of the necrotic process, of a gangrenous nature. To describe in another phraseology—a focus of great danger exists, that might-result in serious consequences, originating and capable of production of palpable poisonous products and mephitic elements from the various chemical processes of transformation and—consequent rearrangement of atoms within the molecule. Herein lies a mine of wealth to be considered and disposed of hereinafter under the title of efflorescent membrane formation, tracing its steps of aggress seriatim unto the different membraneous formation.

It results in the development of chronic ulcers with prominent capillary vessels on the surface of the mucous membrane, and an apparent blanched appearance in the —
intervening intemperance. Blanched owing to contrast of the bright-coloured vessels. The prominence of the vessels does not exist in view during the currency of an acute inflammatory action in the uvula. As time flies the uvula becomes chronically thickened, its lower end more red-bluish, and turned to the lateral aspect to which the follicular condition existed. Thence, if a large uvula is present on the same side, a constant tickling sensation is kept up. The patient all the time suffering from a hard dry cough. To remedy it of course is to remove the end of the uvula or the tonsil or both.

I have not kept notes of many cases, as they are pretty much the same, in position, method of development, and of treatment. Therefore to avoid repetition of symptomatology and conditions aggravating it, have contented myself with that described hitherto in this chapter of uvular follicular formation. But desire to give a few recent notes on one case in particular:—A. O., thirty-three years of age, married, in February of 1865, suffered from a uvular follicular formation almost identical in appearance and method of development to that already narrated. Four days after my seeing the patient, she developed rheumatic arthritis, from which unde
Treatment, she recovered. Again in January of 1886, she developed another urticular follicular formation on left lateral aspect, in the middle of upper third, similar in all respects to the former one, and five days after she developed rheumatic arthritis, from which she recovered with a slight mitral presystolic murmur remaining. The attack in the first instance lasted thirteen days, and in the second, nine.

Patient, father, mother, sisters and brothers are healthy and do inherit any hereditary disease ascertained, but the patient, although looking strong, is of a delicate constitution, corresponding to those we find in young people, who are too much "nursed up", if the expression be admissible. The above case is cited from its recurrence and the ordinary of the patient to receive timely warning and the application of care, which practically runs the case on the rheumatic arthritis. I could cite many more cases from personal experience, not where recurrence of rheumatism occurred, but where rheumatism developed within the week after the follicular condition was first seen and no rheumatism was then present, and many cases where slight pain was complained of and relieved the arthritis pain from due precautions. The repetition is purposely avoided as before said. In many
cases where the arthritic pain developed into rheumatism, the tongue gradually became furrowed, while in some it remained either tolerably clean or perfectly clean throughout. The remarkable features of acute rheumatism consequent upon follicular uvulitis are:—The pyrexia is readily amenable to treatment, and so is the arthritic pain. The former on the second, third or fourth day, and the latter not many days subsequently. The patient is practically soon well and about again.

Simple Follicular Fauces Uvulitis Posterioris.

Is a simple follicular formation of a somewhat infrequent occurrence, and its presence is manifested on the posterior pillar of the fauces, right or left, affecting each side with equal frequency. The position occupied by the morbid process is in any part in the extent of the posterior pillars. In the majority of instances, it is associated with follicular development elsewhere, such as, on the pharyngeal wall or the inferior surface of the soft palate, not on the throat as will be explained satisfactorily under the heading of pathology, in the consideration of the current condition. The usual part affected is central.
and on the antero-lateral aspect. But with a
less frequency superior or inferior to it, if not
in conjunction with a multiple follicular pharyngitis.

The symptoms are of a minor character, such
as, a sense of uneasiness, hawking or coughing
with the object of expulsion of the offending
member.

It occurs in adults of either sex, but have
not met with it in youths or children above the middle period of life.

Pathology — is the same as in simple
follicular tonsillitis; the processes of evolution
and transmogrification are rapid, like unto
those of the tonsillar condition, not slow as on
the whole. Therefore, they do not afford such
an excellent chance for study as on the whole,
although by no means to be despised, as it
would afford signs of the process of transmogrification
coupled with acuteness of perception and
unremitting application for research, to be
productive of a means to explain what was
going on.

The reason why the follicular development
on the posterior pillar of the fauces is not
associated with tonsillitis is easy of apprehension;
because, when the tonsil is inflamed, the
posterior pillar becomes part and parcel of
the same tonsil. The tonsil apparently
swallowing up the posterior pillar from its
coalescence with it. Whereas when the posterior pillar alone is the seat of the morbid influence and action of an inflammatory or Mesh process, it alone stands out prominently from the rest, like a ridge of firm muscular cord of considerable tension power. The cornet lies perfectly flat as though it were collapsed or insulated by another structure being more pert than itself. Therefore though shaggy it remains quiescent. The degree of fixation determines the prominence of the posterior pillar. The bony vessels can be seen prominent on the mucous membrane, approaching to or passing from the muscular-like cord, that is, the follicular eminence on the pillar, contributing their share in the supply of the proper palatine for its nurture. The posterior pillars can be seen to descend into the larynx, with its distal end by insensible gradations become indiscernable in the mucous membrane of the same box, and its proximal end to join with the posterior border of the soft palate. The anterior and posterior surfaces of the posterior pillar stand prominent-and are joined by a curvilinear line. Upon this structure and in some part of its extent, usually the central part, the follicular condition develops.

No authority pains, so far as my experience
extends, develop from this alone.
It results in chronic induration of the
posterior pillar.
Etiology and treatment refer to efflorescence.

Simple Follicular Tonsillitis Anterioris.
This condition resembles the foregoing in
all respects, both in appearance and in
subjective symptoms and objective signs.
The only exception being, that in this morbid
process, the anterior pillar of the fauces, right
or left, are affected at different times and in
different patients. In no instance have I
seen a simple follicle exist on each anterior
pillar, at one and the same time, nor have
I seen a simple follicle on the right anterior and
posterior pillars, at one and the same time,
nor yet on the left, except in cases where the
follicular condition was existing in other parts
of the throat. The term Throat is meant to
be used in a collective manner, not however
to include the tonsils in this instance, but
other parts connected with the throat. For the
reason why refer to last paragraph page 44.
Pathology - is the same as in the posterior,
with the exception of position.
Aged affected like the previous one uncertain.
It results in chronic induration of the...
Simple Follicular Palatitis Molliis.

It does occur sometimes, though not frequently, as a separate condition, from association with follicular development elsewhere in the throat. It results in persons of a rheumatic or gouty diathesis, inherited or acquired. Its position is on the soft palate, either right or left of the meatal raphe, sometimes it is situated posteriorly and medially in front of the base of the uvula, about the juncture with it and the soft palate. So close, is it placed to the point of contact of one structure with the other, that it is a physical impossibility to definitely state to which the priority of claim attaches. If it be credited to the uvula, then it is clearly a case of simple follicular palatitis anterior, a condition, which under that heading has been stated not to have been met with, except in conjunction with other follicular formations. But herein will, after this statement, be appreciated my difficulty of differentiation, as to state, into which category to include this particular modus action. Sometimes it exists such that it is situated half uvular and half palatal.
This is a matter, which it is useless to divaricate upon, as it would not alter the position in the least, nor the structural formation in any shape, and is a nicely existing, so to speak, metaphorically, in a position, where it is an attempted distinction without a difference. The follicular formation is disclosed on some part of the soft palate in its entirety, save the median raphe. But posteriorly where the raphe by insensible gradations becomes imperceptible, here the follicular evolution may be traced and surveyed. It is strange to relate that there is no incidental occurrence on the raphe, neither in the single, multiple or efflorescent follicular formation, perhaps this is owing in part to the physiological difference in structure, and a more firm variety or compact character of raphe, prohibiting the initiation stage of papule formation. Also that, it is not so plethoric in vascular demand or supply to charter such a formation, to be related in a display on the free surface of the mucous membrane, carpeting the substructures.

The subjective symptoms vary and are referable to the throat, and as the follicular formation seldom exists alone, the pain and other discordant phenomena, as also the discharge, vary. In itself it usually
causes very little discomfort.

The period for the occurrence of cestans is similar to that for follicular facitis.

The pathology here is the same as that of simple follicular tonsillitis. Only the produced follicle is less in size and owing to this is not so suitable for study. The haem vessels are prominent and purplish, and the mucous membrane is less angry looking than on the tonsil. The multiple variety of palatitis/pateticus displays another element; concerned in the vehicle formation, which has, as a matter of convenience and reservation for discussion on the subject, been purposely omitted here, because the new element has not been actually witnessed in simple productions, but in multiple ones only. Therefore it would be more permissible to treat where seen, while at the same time, it might undoubtedly be present in this variety. But owing, perhaps, to the insignificance of the inflammatory action, the new element is likewise insignificantly produced. Thuswise, it is not palatable for visual discernment or scrutiny of its unexceptional character. This is not a mere deviation, but is consistent with constancy adopted to impart the reality actually displayed during the expression of the morbid activity.
Results in a chronic inflammatory process. Etiology and treatment refer to efflorescence.

Simple Follicular Palatitus Duris vel Anterioris.

I have not met with this in any shape or form, nor yet seen it associated with a simple, multiple or efflorescent follicular formation, elsewhere in the throat. Therefore will dismiss as non-existent so far as my observance is concerned.

Simple Follicular Gingivitis Posterioris vel Anterioris.

The same remark applies as in the foregoing.

Multiple Follicular Tonsillitis.

This is a condition in which there is a multiple production of follicles at the same time. The papule formation and its consequent stages of resolution, to terminate the production of a vesicle, and its subsequent follicle formation, are not seen in by far the greater majority of cases. It occurs in patients, who through shyness or the fear of trouble for minor ailments, and in many
instances, perhaps, pecuniary, that are the stumbling block for aid, acts as a prohibition in the search of aid in the proper channel. The subjective symptoms are more marked than in simple follicular tonsillitis. The patient is feverish, complains of a hot, dry skin, flushes of heat, and sometimes of perspiration with languor and unfitness for physical or mental activity. The patient becomes irritable, possible due to constitutional disturbances, and more irritable when an erythematous rash shows itself in a secural-like or measles-like eruption, and sometimes as a rubedo-like condition. These erythematous productions are a source of great alarm and consternation in the minds of the patients and their friends, who seldom modify or conceal their opinion of what it is. Often the collateral influence has much to do with the constitutional disturbance as you find, when the temperature of the patient is taken, there is only one-and-a-half degrees indicated in Fahrenheit's scale. This from anticipation of statements and your own conception, inferred from the appearance displayed on the skin, and from these about, may in a great measure be accounted for, but not in all cases, as it is met with in some, where no dread is contemplated, and sometimes where the mind has been at rest, even then the
temperature keeps up the same, for one or two days more. The pulse as an indicator exhibits acceleration of rapidity, often augmentation of volume and increase in force and in volume. The increase may be up to one hundred and twenty beats per minute, seldom more, and when the number of beats is less than one hundred per minute, there is little or no alteration in volume or tension within the arterial wall, although the pulse may become irritable, but never intermittent, due perhaps to a greater exposure to the poison, which is at the root of the mischief. In some cases you do not meet with elevation of temperature, nor yet of alteration in character of pulse. This is perhaps due to a more powerful neurotic controlling power, and perhaps, the patient has suffered similarly before. Thereby testing that a constitutional rudiment is at work but if the patient be a subject to nervous, all the constitutional disturbance are much aggravated, and in such the temperature is elevated, and the pulse shows signs of a febrile condition. Here the stability of the nervous system is more easily upset and as a consequence the patient is victimized by it. The neurotic equilibration can in some instances be realized, after the confidence of the patient is gained and a positive assurance given, that no fever -
exists nor yet diphtheria, both of which they dread. In some instances it is marvellous how rapidly the excited element becomes abated, especially after one or two doses of medicine; the patient will state, that it has cured them. It does in part, but there is their conscience eased, which is still further relieved, during next visit by stating - oh! that is much more favorable for recovery, and that they will be out and about in two or three days' time, which will be the result. Therefore, where there is a nervous, a little pious fraud acts in a most extraordinary way.

Before advancing, it would, perhaps, be appropriate to consider the condition of the tongue and its adnexa, stomach, bowels and urine, before passing to the consideration of the tonsils and their picturesque appearance, which enthralls an observer who has a disclosure in his hands to be revealed are long, substantiated with facts collated clinically and expressed from time to time. Now to proceed and narrate the appearances on the tongue - the impression received is its largeness, flabby appearance and indented margins. The surface of the tongue is covered with a creamy fur, generally white with a yellowish cast, and sometimes brownish along the center, widening in diameter, until it arrives at the anterior
circumvallate papillae, and then narrowing
particularly to the foramen cecum. The extent of
the brown fur on the tongue lengthwise is about
two-thirds, measured from the posterior junction.
The peripheral part on the superior surface is
reddened, inflammatory-looking. The physiological
papillae are raised, and look like as if some
had dabbed them with white paint. The teeth
are covered with a yellowish creamy fur, pro-
ducing a disagreeable sense of the condition
of the teeth. The submaxillary and sublingual
glands are sometimes tender, and feel as though
they were slightly enlarged. Often there is an
abundance of saliva secreted, which may be
due in part to the patient incessantly rolling
the tongue about, thus exciting the physiological
function of the salivary glands. The parotid
is seldom tender. The patient complains to use
their expression of "a nasty taste in the mouth," not bitter; sometimes of a clammy or of a
parched condition, yet not so much as in
the efflorescent membranous formation, in
presently to be described.

The stomach on inspection appears to be
slightly prominent, and on palpation and
percussion unaided and also aided by the
use of the stethoscope, a metallic ring is
audible anywhere in the region of it; it
contains fluids; it is tender when palpated.
deeper and palpitates it is tender. The tenderness extends into the left hypochondriac region and varies in direct dimensions of gastric cardia dilatation.

The bowels are usually constipated and can be palpated along the whole line of the colon. There is no tenderness. Sometimes considerable relaxation of the bowels is met with, the result of protracted indigestion. When bowels are constipated the breath possesses a disagreeable odour.

The urine is diminished in quantity, but is loaded with mato and urinary pigment, named uro-erythrin or purpurin of Freid. This, in part, is due to the indigestion, and in part, as indicated by pain in the joints, to a tendency to rheumatic diathesis development, also in part, due to the upset of the equilibrium of the nervous system, with its attendant changes of slight pyrexia. All of which may act in concert with each other to produce a constitutional rheumatic taint.

The appearance on the tonsil, that is so characteristic of multiple follicular tonsillitis, is a development of vesicular and follicular formations of a disseminated kind. Any part of the tonsil is liable to be involved and to be the seat of non to right a more of these nodular productions. They are of a yellowish white colour and
The size of each is not larger than that in simple follicular tonsillitis. Their presentation is fine and looks like an enlarged tonsil—picturequely mottled to display its decorated surface. Usually both tonsils are similarly affected. Other parts of the throat may be implicated besides the tonsils.

It occurs at all ages from the period of infancy to the middle period of life.

No cases are appended to this as it is of common occurrence.

It results in the production of chronic tonsillitis.

Pathology is the same as in simple follicular tonsillitis, except the tonsils are more inflamed and enlarged, and the constitutional disturbance is marked. For an explanation of which refer to pharyngitis.

Etymology and treatment—refer to pharyngitis.

Multiple Follicular Pharyngitis.

In this there is not much difference in appearance from that which occurs on the tonsil, and is the same in all respects to the simple follicular pharyngitis. Therefore it is unnecessary to describe, because it differs only in seat of predilection and it differs from the simple follicular pharyngitis.
in favour of prepossessing many points in the transverse and longitudinal diameters, in place of a lateral distribution to the medial line only. Although there may be a primate preternatural one and the primo-geniture on a lateral postition, to become an indiciter of a general dissemination to be deployed on the pharyngeal wall. Or the preternal one may be, if a posthumous one can be conceived to be admissible for such, a succeedaneum. In such an instance, the primary follicle would determine the succeedance of a fresh crop, to be scattered over the pharynx, inso much as, the multiple follicles produced were so insignificantly developed as to remain insulated or to continue to be dormant, until the line of progress was inevitable and irresistable from want of a more powerful physiological structural resisting power. Often, when the lateral follicular development is completed on each side, and no central production is visible or contemplated, there is displayed on or about the longitudinal medial section of the pharynx, a minute vesicular formation, with no evident sign of there having been any tangible primary papule formation, nor yet any absolute sign, that this initiate, abortive or hybrid vesicle will be or is capable of transmutation
into the typical follicular condition, signatory of its character. Therefore, have regarded this usurpation of apparent illegal possession as an intruder, and as, an indigent, unwelcomed, and, perhaps, indelible and accidental visitor, which, at present, am unable to ventilate to my own satisfaction, unless it is an abortive element, and a predominating phantasmagoric, contending in a pathological melee with a genuine follicular formation. So far as my knowledge and acceptance of it are concerned, it is regarded as another variety to the condition that led to this dissertation, and a condition which circumstances, as yet, have not afforded evidence warrantable for description or comparison, as I have repeatedly seen similar vesicles, resembling in all respects to the follicular vesicle minus the papule, in measles, varicella, rubella, and scarlet fever on the soft palate and the anterior facial base of the uvula. It undoubtedly, without bias to its origin, can be regarded as due to some condition affecting the throat, and as a specific disease, invading and altering the haemie constituents, displayed in a predilection for the mucous membrane covering some part of the throat, more especially of the uvular base anteriorly and the soft
The multiple follicular formation seldom exists alone, but in conjunction with follicular and efflorescent processes in the uvula or the tonsil. Hence to state positively that arthritis or rheumatic pains exist, would entail a discussion unwarrantable, when it exist hand in hand with morbid processes situate in other parts of the throat. And to state whether the illegitimate variety is a cause of rheumatism or pain in the joints, is likewise impossible, as it is present at the same time as the legitimate one is, or it shows itself subsequently to the legitimate multiple follicular palatitis or efflorescent uvulitis, as a secondary phenomenon.

Observing this to exist at the same period of life, as other morbid processes in the throat, it is only just to state, that its period of occurrence is the same.

The pathology and results are the same as in simple follicular pharyngitis, except that relaxation of the pharyngeal membrane of a greater degree is more apt to follow. Also that a catarrhal inflammation of a non-purulent character, extending to the Lushkaian tube, because the mucous membrane lining the pharynx becomes in continuous with the mucous membrane covering the lower cartilaginous end of it,
at the upper part and on the corresponding side of the pharynx, behind the posterior part of the inferior nasal meatus. The inflammation extends along the mucous membrane of the cartilaginous section of the Eustachian tube, to that over the osseous part, to terminate in the inferior part on the anterior wall of the tympanum, close by the processus cochleariformis. Thence on the middle ear, and sometimes, though rarely, by extension of inflammation on to the membrana tympani, there to ravel in its destructive procedure, with a resulting permanent deafness on that side. On another instance, that came under my charge, in the production of purulent inflammation of the mastoid cells. I was unable to follow this case, as the mother, when informed the nature of it, and the serious consequences apt to follow, was unwilling to submit to the opening of the mastoid process in the temporal bone. She took the child, aged thirteen years, to a metropolitan hospital, where she was left, and the mastoid cells opened without asking the permission of the mother. When the mother brought the child home, the resident-surgeon told her there was matter in the part. The child recovered, bearing a scar, left as a result of the operate interference over the right-mastoid process.
She is of delicate constitution and now suffers from chronic tonsillitis, relaxation of pharyngeal mucus membrane, and destruction of right membrana tympani, with almost total and permanent deafness. She can sometimes hear certain sounds of a high sharp or low pitch, transmitted through the cranial bones on that side afflicted. The hearing power on the left side is fairly good, which is inclined to vary in acuteness of perception.

Multiple Follicular Pharyngitis Hemorrhagica

Here a number of follicles are produced into which blood is poured. Strange be it to relate, that it occurs in female domestices, under similar circumstances as in simple follicular pharyngitis of a hemorrhagic nature but differing from it by the position occupied, which was lateral. In this it is central, high up and medial, pendant like several dark coloured English grapes, closely approximated together, and covered with a membrane shining, bright and clear, which is transparent when the vesicle is evacuated of its contents. As regards the symptoms, there is nothing more to be mentioned than in other pharyngeal follicular processes hitherto narrated. It usually lasts from two to five
days. I have met with three cases, two were at the age of twenty-three and the other at nineteen years. In each one there will or rather is the amenorrheic symptom present at the functional period. In no instance has the arthritic pain been complained of since.

Pathology - The stages of evolution have not witnessed, only the fully fledged bunch of hemorrhagic follicles, looking just as if they were pendant from the roof of the pharynx. The cause is probably due to a germ developed in a low lying, damp neighborhood, aided, but why and how by functional amenorrheic symptoms, cannot explain. For further explanation refer to efflorescence.

Treatment - refer to efflorescence.

The three cases are not appended as the foregoing is an epitome of them, incorporating the whole. Thence avoiding repetition and the boring of the thread of discourse.

Multiple Follicular Pharyngitic
Hemorrhagica Recurrens.

Have met with one case only. The following is collated as a summary of the case, because the material at hand was insufficient to give evidence on good and indispensable grounds. Unlike the recurrent simple hemorrhagic
variety was not recurrent periodically. But made its appearance, without precision of time of occurrence to patient, and demanded attention when inconvenience arose, for a short time only, waiting to disperse membrane and all its contents, leaving no palpable evidence of its attachment. It reappeared again on the fifth day, like a bunch of plum-coloured grapes, fundaunt from the roof, to remain two days and be removed in masse as before. Again returning on the second day, in subsequent to the disappearance of the last, to be lost on the third day, not to return. On each occasion the mass of hemorrhagic follicles were expectorated as a clot, enclosed in its tunics, with the usual result of a patient's proteinaceous material for respiration. In each instance the attachment was central, and high up in the pharynx.

The age of the patient was twenty-six years and she suffered from dysmenorrhea associated with hemorrhagic symptoms. There was nothing else worthy of note in the case, except that she was a female domestic, similar to those who suffered from simple follicular pharyngitis of a hemorrhagic nature.
Multiple Follicular Fauces Anterioris et Posterioris.

There is nothing to add to the simple follicular fauces anterioris vel posterioris, respectively, and what applies here, applies equally in this, except there are many follicles detailed during the extent of either the anterior or posterior pillars or both on different sides of the throat. Sometimes both anterior and posterior pillars on same side are affected. In no instance has both anterior pillars been met with affected at the same time, nor yet the posterior pillars. Sometimes the anterior or the posterior in the same side are affected only. And in no instance has a recessed condition been seen, that is, the anterior on one side and the posterior on the opposite or conversely.

Multiple Follicular Uvulitis.

So the result of a morbid process, that does not as a rule occur primarily, but secondarily to efflorescent uvulitis, or multiple follicular or efflorescent tonsillitis. And what applies in simple follicular uvulitis, also applies here, only remember the multiple production is disseminated on the anterior and lateral aspects of the uvula.

Occasionally a spurious variety occurs
resembling that kind, which occurs on the pharynx in multiple follicular pharyngitis. This is secondary to the uricular one, and unlike the pharyngeal one does not exist at the same time, as the genuine follicular one. Its presence here does not afford any further evidence of its nature, only that it is secondary and possibly abortive. Granting such to be the case, it would be just to assume, that the genuine follicular process had rendered the system inoculable and the abortive production was the result.

The symptoms are indeterminate and cannot be differentiated from those associated with existing tonsillar ones.

As previously stated the appearances are the same as in simple follicular development, except the vesicular formation is of larger size, and consequently effusion of serum and plastic material into each individual vesicle is more.

At any time of life where follicular disease exists in the throat, may the multiple follicular vesiculitis show itself.

In pathology and results, there is nothing to add to what has been related under the heading of simple follicular vesiculitis.

Etiology and treatment refer to efflorescence.
Multiple Follicular Palatitic Mollus.

It is seldom the multifold production of follicles occurs on the soft palate, primarily as a separate condition, but is, in by far the greater majority of cases, associated with a multiple follicular or efflorescent development on the tonsils. Its disposition is on the soft palate and laterally situated. Never have I seen it on the median raphe or in the immediate neighbourhood of it.

In this morbid production, as on the pharynx, a spurious vesicular formation of a multiple kind is seen, along the course of the median raphe and on the mucous membrane by the side of it, but not invading any other part of the soft palate. The tendency of it to locality, namely, central and about the median line, corresponds to that of the pharynx, differing only in this respect, that the vesicles are more easily seen, and differing from a spurious production on the uvula, which is scattered and not central. But in no wise has it contributed any measure favourable towards the disclosure of these vesicles, its function, part played, of its evolution, or its relationship to the true follicular formation, or why on the pharynx and on the soft palate it is medially situated to the true follicular formation, why it is scattered and secondary only to the
True multiple follicular tonsillitis and not along its
medial line, or of the value the one bears to the
other, why in some instances it is present and
in others it is absent, why at times it comes
pari passu with the follicular formation, or why in
some instances it should come after the legal
one and remain in situ for days after all
traces of the true production has vanished, to
disappear when the tone of the system was
established by means of remedial measures
and the partial hydramia induced from
follicular production as a consequence of the
matted process, of a specific character primarily
affecting and degrading the condition of the
blood, has been overcome, and the natural
status quo ante restored.

The subjective symptoms are merely those
of uneasiness felt at the back of the mouth -
and discomfort during the act of phonation
and of ingestion of various articles of diet
aggravated more during and subsequently to
the accomplishment of the last-named act.
Arthralgia does not exist in multiple follicular
palatitis mollis, except where it is associated with
multiple follicular tonsillitis, also with simple
and efflorescent.

The period of occurrence corresponds to
that of multiple follicular tonsillitis.

Pathology — The processes concerned in
The follicular evolution, some are better marked, some more indefinitely, than others, and a new phase relating to further instructiveness in the production of the follicles, which, as yet, have only been seen in this situation, and more clearly impressed, when the soft palate alone is the seat of the morbid process, than when in association with follicular processes elsewhere in the mouth.

To treat the phenomena series of and succession would perhaps be more approbative with distinctness and definition to shunt a selection memoir and its possible malapropos. The papule formation is frequently so imperfectly produced, that it would be impossible to state such a precursor did exist; but from facts collected and evidence produced, it is beyond a doubt, that its existence is insignificantly developed, so much so, that no attention here is generally drawn to it. Sometimes the production is adequate enough to convince of its presence, and when such is the case, by the gradual advance of the steps of the process series, and the lividity of the mucus membrane over it, is markedly shown. Occasionally the papule presents like a pimple on the mucus membrane, sooner or later to be surmounted by its vesicle, in some of its stages of transformation into the follicle.
Sometimes quite incidentally a papilliform arrangement is seen on each individual arrangement or follicle; sometimes the papule of one and the papilliform arrangement of the other are present at the same time; sometimes the pimpel-like arrangement and the papular one exist together; and sometimes a combination of all three are offered to view, either on left or right side of the soft palate or one on one side and the other on the other respectively. The vesicle is smaller than met with in other parts of the throat, why such is the case, is a difficult matter to decide, as the loose areolar palatal tissue and the blood supply for normal and for a prenatural process are abundant. The loose nature of the areolar tissue ought to favour the production of a large vesicle, same as the loose areolar areolar tissue does. During the morbid process the blood vessels are more prominent and display the course of the hemic structures, exhibiting the inter-communicating channels, and the colour of their contents, coursing to and fro, into and from the follicular development. The palatal mucous membrane in the immediate neighbourhood is of a maroon colour, extending signs of the inflammatory action, to impart its effects in the colour, congestion of the part, slight oedema, and mucous secretion, often with precision to —
indicate the extent, and what part of it is more deeply engaged than the other. Another phase in addition to the inter-communicating and direct-hemic channels to and from the follicular production, frequently exhibiting itself in the papular stage, to become more palpable and evident as the process advances to completion, which was the situation, where this element-attacked attention, prior to a similar production demonstrating its appearance in other parts of the throat, lead to the discovery of an amphitheatre-like or a wheel-like arrangement or representation, disclosing its component-constituents parts in an exquisite manner. The wheel-like arrangement minus the spots is to be seen anywhere on the soft palate, cave along the course of the raphe and the mucous membrane adjoining to the median raphe in its distribution. But better marked and larger nearer the lateral periphery, when they are produced. Near the median raphe the less was the significance and far more frequently and far more frequently in this apparently independent area the wheel-like arrangement was entirely wanting. This peculiar representation of structure, was devoid of the lines, which generally indicate the inter-folliculaeretic supporting framework.
Now to advert to a detailed description of the
of the wheel-like arrangement. The peripheral
part of it is sometimes raised above the surrounding mucus membrane, then it presents a very bright-red margin, apparently serrated or indented with a raw margin; sometimes the periphery of the wheel is raised and edematous, which preserves the predominating circumambient configuration, and the colour is less intense. Although the inflammatory
action outside of it, is more intense in the tissues immediately adjacent to the periphery
of the wheel, and is more angry looking and consequently more deeply coloured. This may be a matter of contrast, as when the periphery is raised and very red, the surrounding mucus membrane in all cases appears less inflamed, whereas it is not and is only apparent from contrast. In all cases the circumambient-mucus membrane to the wheel is approached by the hemic structures, often inter-communicating with themselves and not with other wheel-like arrangements from a distance or with none in close proximity. Sometimes the blood vessels are prominent and often palpably so, for half-an-inch or more before reaching their destined structure running in, in all directions to contribute their supply in order
to satisfy a demand, caused by the morbid process, resulting from an affection, specifically so and attributable to the blood. In some instances and at the same time, it may be seen distributed on one side or on both sides of the soft palate, and in the same patient different degrees of intensity of inflammation and different quantities of morbid nature, relatively considered in representation of appearance and of colour may be seen. Frequently one of these wheel-like arrangements are so well developed that it is encouraging to survey and further study, to watch the progress. The peripheral zone having now been disposed of, the intermediate or middle zone will be considered, as already mentioned, sometimes it is raised and edematous, which is due to a slight exudation of serum within the periphery, imparting to the mucus membrane a paler colour and forming a great contrast with the surrounding implicated parts. Sometimes a similar appearance is produced, though from another circumstance, that presses upon the mucus membrane, conferring upon it an albescent external show and the idea of oedema, which is not the case. But due to a larger papule, containing the inflammatory
exudation or merely an inflammatory induration, both of which in result amount to the same. Sometimes a distinct white circular line is seen—the centre of the middle zone, not always in the middle of it, but more frequently just within the peripheral zone. Why this peculiar phenomenon should be present is not easy to explain, as the part where it is, is not more firmly pressed upon than the remainder so as to render it anemic and produce an albescent appearance, and yet the vascular supply appears to be the same to all parts. Provided one part—in a circular manner was more firmly pressed upon than the other, the phenomenon could then be easily explained, but as it is, it is impossible to elucidate. The albescent line does not persist after the inflammatory action has subsided. Sometimes the middle zone looks intensely red, especially when the central zone is occupied by a clear vesicle or its transformed contents, or when there is no intensely red peripheral zone, both of which being absent do not exist. The power of distraction; merely permitting of a finer perception of its colour. The colour is sometimes partly detached from where the two foregoing conditions
excit, as the denuded margin of the peripheral zone and that of the central zone after the vesicle has ruptured and the vesicular membrane disappeared, are intensely red and the depth of the colour enhanced by the inflammatory action. Now to advert to the central area or zone, which is occupied by the follicular vesicle and the seat in which the various stages of transformation are concerned in the production of the follicle. The colour of the zone thus occupied varies with the evolution from a clear transparency to a yellowish white. It never becomes red, or verdant, or nigricent, as it sometimes does on the back of the scrotum in the efflorescent production or exhibition. Sometimes the production is so rapid and probably the rate of effusion correspondingly rapid, that the vesicle early ruptures, which answers for the appearance frequently seen, namely, that the peripheral and middle zones are present and that the central zone is like unto a punched out space in the centre, with an extremely red punctiform hollow, devoid of fluid and apparenlty of inflammatory induration. Hence it is only fair to assume — the inflammatory action was very acute, not granting time to develop
a papule, except of a very temporary fluid, but effusion and rupture or conversely and
the two occurring almost pari passu. Consequently
there could be no inflammatory induration,
and hence the sticking appearance produced,
where all the component constituents of the
wheel-like arrangement exist, and are
marked, such a differentiation is easily
surveyed, together with the prominence
of the vascular structures herein described,
and the varied appearances to contrast one
wheel-like arrangement with another.
Hereunto is prefixed, accessories concerned
in the morbid affection on the palate, 
exceedingly well displayed, and it is
probable the same as a similar modus
operandi is utilized in other parts, only
the processes are not sufficiently well
outlined to be discernible as they occur
previous to the examination, because it must
be remembered the disease has shown itself
often long before the patient condescends to
seek advice for the inconvenience caused.
Therefore it is within limits to assume
a similar production is concerned in other
parts, when the development is shown and
is progressing, with the insignificancy of
the accessories in that part or in the
circumambient area.
It results in the production of a chronic palatalitis and prominence of the vessels and discomfort to the patient. 

Etiology and treatment refer to efflorescence.

**Efflorescent Tonsillitis vs Efflorescence.**

In this, as the name implies, an occurrence or production on the tonsil of a membrane, which in some respects resembles diphtheria and in others differs from it.

The term efflorescent is intended to convey the impression of a production or a shooting out of numerous arms from a point or a general pouring out of a substance, most probably of a hyperemic nature, or a multiple local pouring out from numerous stomata, which become or are continuous from coalescence and the resultant is the formation of one or more membranes on one but most generally on both tonsils, but may be elsewhere, than on the tonsil, in the throat, and then as a matter of course is not tonsillar. In fact, to designate tersely, it occurs in the throat, principally on the tonsil, and then by aggressive extension of a fluid of antecedent to other parts in the throat, or it may be primary in other parts, to display itself like nitrate
of soda or nitrate of potash does in Chili, South America, or in India, on the ground, which springs up in a night and is designated as an efflorescence of nitre on the ground in these parts. Hence the choice for the application of this term to certain diseases, characterized by the appearance of a membrane in the throat. The manner in which the efflorescence on the tonsil is produced will be explained under the heading of pathology as far as is capable of explanation.

The symptoms, subjective and objective, are more marked, than in the follicular production. The severity depending according to the extent and the time occupied in the development of the efflorescence, and also in the extent the system is involved, acting in concert with the constitutional temperament. Sometimes the symptoms are distressing in more ways than one, frequently leading one to assume, the patient is suffering from an eruptive fever, or that the patient is the victim of muscular rheumatism from stiffness in mobility of neck, or of arthritic rheumatism from the existing complaint of arthralgia.

To treat the subjective symptoms first, where there is a multiple efflorescence, that is to say, two or three efflorescent membranes
on each side — the severity of constitutional symptoms may not be so great, the patient complains of feverishness, stiffness of the neck, with pain on rotato-lateral movement and also of discomfort in the throat, perhaps of a throbbing on the sides, fulness therein, difficulty in movement of jaws and of a deglutition and pain during the accomplishment of the initial or act of swallowing, of hot-flashes and cold sweats, and a rigor, which generally begins in a peculiar crawling or creeping sensation, or sometimes of cold water sensation, ascending along the course of the spine, passing to the upper extremities and then to the lower, and lastly advancing to the body in the form of cold amensia. Sometimes there is a dense of flashes of heat and of cold alternately, but no cold sweats. The tongue is very dry, covered with a white or brown fur, or with a brown centre, similar to what is seen in fevers, along with a moderate amount of dryness experienced in the mouth. The patient also complains of uneasiness in the upper epigastria and left hypochondriac regions, due to distension and irritability of stomach and pain in the left side of the chest and in the inter-pectoral region, due to the
same cause. Bowels constipated, usually no evacuation for days, sometimes the opposite condition is present along with borborigmus, due to first gastric and then intestinal dyspepsia or catarrh if the term be preferred. And lastly of the small quantity of water passed, its high colour, its thickness and the staining of the stools.

The sensory subjective symptom is, — the one perceived by the olfactory apparatus, when near the patient, is the foul character of the breath. The visual objective symptoms and signs are, — on the tongue is the loaded character, which the patient often describes as above; the tonsils are much enlarged and the possessors of one, two or three patches of eflorescence, whose situation is variable and it would be presumption, if an attempt to definitely localize was pursued. The patch or patches of eflorescence varies in dimensions from an increase in size of the masticatory tubercular production, after lesion of its continuity and dispersion of its contents, up to the size of a three-penny piece, on each inflamed tonsil. The colour is usually of a light brown or of a yellowish or a peculiar dirty white; sometimes in the centre of one or more of these patches is a
light-green varying to a darker is seen and very rarely red, contrasting the colour of the remaining part of the efflorescence. The efflorescence looks as though it sat upon the mucous membrane of the tonsil, with occasionally a raised edge or a combination of the two. When it has a general diffused margin, it becomes lost in part or into by insensible gradations. If it be the first attack of efflorescent membrane formation, the production is usually central. Should it be an attack super-added to a previous follicular one, then, if a small efflorescence appears, it is one of small dimensions, offering to view the patch which may be central, but may be on any part of the tonsil or tonsils pre-occupied. The appearance displayed will be similar to that already described or disclosed. It may or may not have an alteration in colour in the centre. There is no certainty of it, nor yet is it so prone to it as in the first attack, because the glandular substance of the tonsil is invaded by inflammatory products resulting from a previous tonsillitis, and there is not the proclivity in the latter case. Therefore there is not the facility for escape of blood or blood pigment to become altered, and to be
aided by the processes concerned in a
alteration by any extraneous organic
organisms or influences floating about in
the atmosphere, conveyed chiefly during the
act of inspiration, and the deposition of
these said influences on the efflorescent
membrane.

The quantity of urine voided is small,
from ten, fifteen or twenty ounces, high
coloured, loaded with urates and uro-
erythrin pigment, staining both the urinary
sediments and the interior of the utensil,
where it remains in contact, no albumen,
mucus or sugar is present, but contains
detached epithelial cells from the kidney,
seldom in a molecular state but intact
and no blood. Reaction acid. Specific
gravity up to 1020 or more.

Temperature may be elevated one or two
degrees Fahrenheit. Pulse may be
accelerated up to about twenty beats per
minute—above normal, but regular and
a tendency to be fuller than natural.

There may or may not be a scarlatin-
like or measles-like eruption out on the
skin.

Let-us now look to efflorescent a
membrane formation, where a tonsil is
occupied or covered by one membrane,
Spreading in all directions to the adjacent parts, sometimes involving the superficial textures in the advance, though rarely. It is a great rarity to find it unilateral, but it is usually bilateral or one tonsil is covered with efflorescence and the other with multiple follicular formation soon to develop into an efflorescence or when seen one tonsil may be only enlarged and inflamed, soon however to be covered with multiple follicular formation and then efflorescence, unless speedily checked by means of treatment. That is, both tonsils may or may not be implicated to about the same degree and to a similar extent. It is a point that will be considered under pathology, how enfluenza arises and why one membrane only is seen on the tonsil, in other words a membrane on each tonsil.

The symptoms, subjective and objective, are much more aggravated, as a general rule, though not infallibly so, as at times there are very few present beyond the uneasiness in the throat. Man in the foregoing description in some instances, provided a careful examination is not done, the medical examiner will be misled and the examinee be the recipient of a diagnosis of a disease
that in no way affects them. Hence have introduced a few remarks, in order to annual 
incorrectness is possible and to place on the 
guard, that there is treacherousness in it, 
for example, you see one case with a 
roseolatus rash, resembling in all respects 
scarlet fever, except the punctiform appearance 
and in another may have a typical measles 
rash, but there is the want of the regular 
concentricity. In either case the rash may 
only last a few hours or one or two days, 
leaving no other sign after its disappearance, 
which looks strange and the patient's friends 
afterwards will be inclined to doubt your 
diagnosis. Yet in another case you will 
meet with a hot, prongent skin, sore throat 
and headache complained of and other 
concomitants of a fever on the brink of 
showing itself, or at least you are in 
contemplating such, only to be greatly 
disappointed by your treatment and the 
more appearance, or as you perhaps 
imagine, the suppression, of the rash. 
Again you are, when asthmatic or a 
flitting nature in the large artiodotes is 
playing about in conjunction with other 
signs and symptoms misled and cause 
you to think of rheumatic fever, to find 
yourself deceived. The patient under
proper and judicious treatment, with a few doses of medicine or at the expiration of the first day, finds himself or herself much relieved and benefited, quickly advancing in a few days into a state of analysis; and to be well and about within a week, sometimes only requiring four or five days. This is a circumstance that no one can much wait for acute articular rheumatism, nor yet for diphtheria or scarlet fever, as the fever does not in any case subside in acute articular rheumatism or scarlet fever, within a day without a probable relapse; such a relapse never occurs with efflorescent membrane formation. Further, diphtheria patients are not out within four or five days time and chances are they are dead within the protracted time, which is not the case with efflorescence. There are other dangers attached, but will at this juncture purposely omit, as they more fittingly come under pathology, and my purpose here will then be considered under that heading, as perhaps being more concerned in explicitness and in appreciation.

The subjective symptoms expressive of this disease, whose purport of predilection is not exactly a sericines nor the cornic alone, but involves the surrounding parts
ad libitum, unless needed; its prehension is by direct contact, favored and aided by constitutional derangement consequent upon direct or indirect inoculation. The most prominent symptoms are: stiffness of neck and a fear of mobility of it; the patient laboured under such restrictions roll their eyes laterally to look at objects placed sideways to them; a hot, dry skin sometimes with a temperature elevated as high as 102°; dry clammy tongue with an disagreeable taste in the mouth, soreness in the throat, associated with difficulty and painful deglutition, and a peculiar thick, husky and often nasal and sometimes a languid, kind of voice, and hurried respiration; sometimes retching or actual emesis, resulting from the cataract condition of stomach and irritation in the throat; and of high coloured, thick and scanty urine, with a copious deposit, in which the patient's stools are almost all solid matter, staining the chamber utensil of a rose pink colour. Also, may be of the roseolatosus rashes as before mentioned, covering a larger area.

The greater majority of the objective symptoms are well defined - the cheeks often are flushed and hot to the hand, not -
relatively but actually as the clinical thermometer will indicate; expression of the patient is anxious, breathing with mouth open, as nasal respiration is almost totally obstructed, thereby causing it to be painful and disagreee. The circulation by the indicator is much too frequent, but regular, reaching as high as one hundred and twenty, or one hundred and thirty beats per minute, full and compressible and of tension more than normal for the individual. If the patient has notified the existence of a rash, it will as a rule be limited to the extremities, upper or lower, but more definitely defined on the inner aspect of the thighs. The eruption will be of a red erythematous kind, very much like scarlet fever without the puncta or it will be raised like that of measles with no tendency to become crescentic. Sometimes the eruptions are met with on the chest, and very rarely indeed on the abdomen, but more frequently on side of neck, forehead and face. The arthralgia complained of is increased by pressure over the joints, more particularly the knee, and by movement of the joint at will, but not observable otherwise. The breath is very offensive; tongue loaded with a thick whitish or brown fur; Convulsions...
enlarged and covered with a membrane, varying in size and appearance. The efflorescent membrane may occupy the greater part, or the whole of each tonsil, and extending gradually to the soft palate, thence to the uvula or to the pharynx, or it may be invading all three. In only a very few instances have I seen the efflorescence limited to one tonsil, yet the other tonsil was covered with particular eminences of the usual described colour and appearance, and in no instance has one tonsil been absolutely free whilst the other was the seat of morbid action. The appearances of the tonsil varies somewhat, in extent of envelopment, and shades of colour in the membrane, in association with the plain mucous lining the touching stethoscope. The envelopment of the tonsil is the draped condition, irrespective of the associates, some of which are and some of which are not, inseparable from it. The shades of colour vary, it may be of a pretty fair colour, or of a whitish appearance, or even greenish in the greater part of its extent or throughout, or it may look just as if it had been dabbed here and there for the sake of artistic purposes with a bit of green here and another bit there.
or a bit of red here and another there, or the
two colours may be interspersed with a
predominance of green. — Sometimes you may see a focal centre with
a surrounding diffused green as though it
was interwoven in the efflorescence. The
bright-red and the green show a great
contrast, as often there are shades of green,
the brighter shades being nearer the centre,
passing to a duller and more pale green as
the periphery of the coloured area is reached.
The seat of process is not determined by
a previous follicular development, but by
a follicular development. Then going on and
the consequent rupture of the same, with
the necessary pigment forced out to —
become altered. Sometimes though rarely,
the whole efflorescence is of a blue slate-like
colour with a greenish tinge or two in it.
The appearance in configuration of the
surface of the efflorescent membrane varies,
for example in a first attack, where the
tongue is enlarged, and the surface of the
mucous membrane is smooth and regular,
the membrane over it adapts itself, and
likewise is smooth and regular, fitting
like a cap closely applied to the tongue.
Where the tongue has been the seat of a
previous inflammation and as a result a
subsequent fibrous induration, from organization of inflammatory products, rendering the surface irregular and depressed or retracted here and there, through the agency of the contracting freshly organized new fibrous tissue, to be productive of inundation of the tonsillar mucus membrane. Here in such an instance the membrane upon it will pucker and present a similar inundant appearance, as the adaptability of the membrane is close to its substructures. In such an instance the pits or hollows of the efflorescent membrane appear darker than the rest and occasionally is pigmented with a verdant-arborescent-shade. The summits often have a dusty aspect through arrested organic matter from the atmosphere during the process of respiration and the consequent friction of the air over it. The signs of such irregularities are apt to be misleading, from the fact, that it is imagined oedema exists or enclosed effusion is retained by the membrane, but prick the membrane at one of these places and you will find no such condition exists. It was only apparent—as will be inferred from the description of the cause. The stomach is catarrhal and irritable, edilated and contains much flatus, perhaps
in part owing to the dried of the insect. Enamel are usually constipated. Liver sluggish and left lobe often tender to pressure. The glands of the neck, that is, the lymphatic glands situated posterior to the posterior border of the zygomatico-mandibular muscle, are enlarged and tender to slight pressure. The submaxillary and sublingual glands become tender but not enlarged. Movement of the lower mandible causes increased pain in the throat and in the submaxillary glands on both sides, which are correspondingly affected with its respective side of the throat. Also aggravation of pain in the ears, which at times amounts to a bilious aurium, sometime ringing, buzzing and various descriptions of noises in the ears are observed and described by the patients. Sometimes the patient is almost deaf from plugging of the Eustachian tube, the result of extending inflammatory action from the tonsil along the contiguous mucous membrane and its substructural elements. The plugging of the Eustachian tube may be due to mucous or to thickening of the mucous membrane in the tube and occlusion of the same. The urine as the patient has noticed, is seetly and contains a large amount of sediment chiefly urine of soda, with a few oxalate and phosphate of lime crystals.
and the urinary pigment—already mentioned, occasionally a little more than a trace of albumen is present, but no mucus, sugar, bile or blood. The temperament becomes nervous, slight noises are noticed and the patient is apt to become irritable and very sensitive. Mental headache is generally complained of, but is usually sympathetic or referred from the gastric organ.

This efflorescent membrane formation is a true expression of the diathesis to which the victim, sooner or later, if he does not adopt precautionary measures, both with regard to diet, exercise and clothing, be overtaken, as it is the forerunner of rheumatism, whose latency still remains untold, and whose potency will be a treachery to the individual, when once the brink of the precipice is overstepped. Very slight digression will launch the patient into an attack of severe rheumatic arthritis, if not rheumatic fever, to leave its disastrous effects behind, to be tolerated at leisure by the victim. The manner in which the rheumatic diathesis is probably established will be deployed under pathology.

The pathological conditions and changes in efflorescent membrane formation are complex and present many points, which will be −
difficult to unravel or disentangle. As regards the efflorescence and its consideration, there are a few points to advert to, namely, the appearance, configuration, consistency, size, colour, method of production, and points of similarity and dissimilarity to another membrane designated by the name of diphtheria:—

The appearance of the efflorescence, that is expressed in another phraseology, — the act of coming into sight, is that of the production of simple follicular tonsillitis, which succinctly expressed consists of the following stages:—

(a). Papule formation beneath the mucous membrane of the tonsil.
(b). Transit of the papule towards the free surface of the tonsil.
(c). Surmounting of the papule with a vesicle, the altered condition of the contents, varying with the degree of inflammatory action.
(d). Rupture of the vesicle and consequent effusion of contents and other hyperinotic material.

For further discussion of these various stages refer to simple follicular tonsillitis. The configuration or the form taken by the efflorescence is variable. Sometimes
it is rounded with irregular margins, and some of these irregular margins throw out processes from their distal, that is, peripheral, ends, resembling antennae; sometimes an elliptical; sometimes it is regular passing by imperceptible regular advances or to the surrounding parts; sometimes one part divergently from the main body, and this frequently is due to coalition with another diverticulum from another body—in other words efflorescent patch or where two or more antennae of the same main body coalesce to produce a diverticulum, or where processes are projected from two or more follicular prominences to cause the same effect. These varieties of margins enumerated constitute the peripheral configuration. The external or face configuration may be perfectly flat or the torus, assuming the same shape as that of the torus. It may be papillated here and there, causing the resemblance of venous or excrescences with the interpretation of the efflorescence and upon the excrescences. It may resemble a parabola with its elevated central part, and a rapid convexity along the central part to its periphery; and at the poles of the central part, or it may be raised at one end only and then pass gradually with a sloping surface.
to the periphery of the efflorescence. These irregularities are in a great measure—due to the papules, which remain some little time, where the vesicle formed and lesion of continuity resulted, also may in part be due to effusion confined beneath the efflorescence, and still may be due to the result of a tonsillitis or follicular process on the same, causing certain portions to be retracted and other portions being left smooth.

The consistency of the efflorescent membrane is variable. As a general rule the impression received through visual survey is, that it is of loose texture, not of a firm tenacious character, and easy of removal by mechanical means, which is not always the case. Once removed and an application applied, to be mentioned hereafter under treatment, the membrane does not in by far the greater majority of cases return, nor does the removal of it, but seldom, leave or cause to be made a raw bleeding ulcer. After the operation of deliberate removal or where left to itself, it does not leave a sign that could positively be sworn by, as to recognition of a previous efflorescent membrane. It can with a camel's hair pencil fixed on a holder and slight pressure be removed, but not
always, as at times, it appears to have a
great attractive power for the mucous-
membrane, while the removal is rarely the
cause of haemorrhage. If left and painted
for a few days it will disappear. The
consistency is perhaps rendered less firm
through the agency of being continually-
covered by means of mucus, which must
tend to soften it, and produce a tendency
to fritter away.

The size of the efflorescence is variable.
It may be half that of a three-penny-piece
and up to about the size of a shilling or
and larger, according to the extent it spreads
on to the surrounding parts. The size is
greatly determined by the size of the
tonsil from the inflammatory action. ---
There may be in place of one large membrane,
two or three smaller ones present at one
time and on the same tonsil.

The colour of the efflorescence is
variable and is dependent upon, --- the
exudation of fibrinous material and serum
from the blood, the pouring out of blood
corpuscles, blood pigment, in both, under,
into or upon the surface of the membrane,
and the consequent alteration of the blood
corpuscles, blood pigment or both, due to
a new position; the advance of the morbid
process exerting its influence in conjunction
with the temperature of the part, aiding—and
abetting the same; and the exposure to
friction of air over it, the deposition of
subtle extraneous products contained and
floating in the same for no beneficial,
but probably, for injurious purposes,
capable of displaying their power in
potency, from induction by local contact,
with its penetrative method of advance
in a suitable pabulum. Thence, the
colour of the efflorescent membrane may
be altered in shade from that poured out
to another one. There is excess of fibrinous
or plastic matter thrown out, due to
the hyperemic condition of the blood,
induced by the tendency to inflammatory
action of a rheumatic tendency, owing to
influences possibly demanding a fermentative
change to bring it about. The fibrinous
material when first exsorced is of a very
pale straw colour or a very light-buff,
but when contrasted with the other—inflamatory parts, it gives the impression
of a mucous-like or alvecent membrane,
made dully-looking by the friction of foreign
particles and the arrest of the same on
the membrane. This impart or causes
one to conceive that it is a peculiar
dirty structure. By concentration of the serum and effused material, the colour becomes of a yellower hue, and finally may become of a buff colour. By repeated effusions and consequent dessication on the tonsil, accomplished by the already inflamed tonsil, and the drying medium through friction of the respired air over it, aided by increase of temperature in the tonsil from inflammatory action and the heated expired breath, leads to the production of a deeper colour and the super-imposition or thickening of the membrane. It is aided by heated breath passing over the tonsil, the passage of which is exaggerated, owing to increase of body temperature, causing increased respiratory effort. Thereby admitting of a good, rapid and efficient dessicator, which is hampered by the free mucus secretion, continually moistening the surface, and acting the part of a protector to the efflorescence to arrest a fretting away. But, at the same time, it presents a better surface for the arrest of foreign particles upon it. The exuded material having now been treated with due deference to its origin, and alteration by concentration of its more
plastic elements, let me advert for a short space of time to the poured out constituents from lesion in continuity of the circummembra-
supporting structure, and the haemic -
capillary vessels or vessel, synchronous -
all and consequent upon the vesicular
rupture. This is due to relief of pressure
from the delicate stroma in the part, and
at the same time the heart working with
its increased and physical vigor, excited
at these times from the morbid process and
the inflammatory action, due to alternatin-
g of physiological structures, partly altered;
the degenerative changes in the vessels -
and the supporting structure upon which
it partly depends. Thus it permi-
from the altered physiological condition of
the capillaries, the altered condition in the
supporting framework, and the increased
action and effort of the cardiac organ, to
accomplish these phases, through which -
the lesion of the haemic capillaries is brought
about. The lesion having occurred, but
being of a minute nature, allows of the
escape of some of the constituents of the
blood, such as the red and white blood
 corpuscles, blood pigment and fluid serum,
all of which are limited as vindicated by
the after physical signs. At the same time
it must not be ignored the possibility of escape from an attenuated capillary blood structure, of the permissibility of escape of blood pigment, and of serum and fibrinous material in a fluid state, just as much as it can be conceived of the serum to, escaping from the vessels into the papule to produce the vesicle, then the follicle, from the inflammation or the morbid action in the tonsil. Hence it will be perceived, there are two methods of escape of blood pigment- and fluid constituents of the blood, but one way for the escape of red blood corpuscles. Whilst the white blood corpuscles being endowed with a peculiar function find another way of escape, namely, by first protruding an antennae-like process through the already overstretched vessel, and the white blood corpuscle by attenuation and its inherent ameboid movement, gradually with an indefatigability for progress until it has accomplished its escape; aided and favoured in its progress by its position in the blood stream, being in close apposition to the internal lining of the vessel, and further favoured by the blood pressure, which in part contributes its share in aiding the facility of escape. The red blood corpuscles being destitute of power to throw out such a process, and
being in no way possessed of ameboid movement, cannot under any pretence, except that of lesion of continuity of hemie structure, find its way out of the proper channel. Hence the hypothesis that lesion or rupture of continuity of blood capillaries or capillaries has occurred. Otherwise, where have the red blood corpuscles come from? There is the possibility of escape of blood pigment without solution or rupture of capillaries, as witnessed in various kinds of chromidrosis on the skin, and as further witnessed by the use of the microscope in efflorescent membrane formation, in addition to red and white blood corpuscles. The former with its biconcave discus, also a molecular and granular debris and with these a pigmented material. The latter alone may be in the efflorescent membrane without any other corpuscles save the white blood corpuscles. The pigment must have escaped from the blood capillaries with rupture in the same or it may have escaped like the leucocytes without solution in the capillary structure. Now the method, of how the colour, in the efflorescent membrane varies at points, is caused by the escape of blood or blood pigment at different points during the inflammatory process, has been demonstrated.
It yet remains to show how the variations in colour are brought to play. The whitish, fawn or yellowish grey colour has been previously disposed of, therefore it does not call for further attention here. The red colour is easily accounted for, as it may or rather is due to the red blood corpuscles or pigment. The dissemination of the same, partly or entirely, throughout the efflorescent membrane is caused by many individual points of escape, with subsequent diffusing of the colour. The green is obtained from the red blood corpuscles or the pigment, by pathological alteration in pigmented constituents. This is caused by an escape and alteration in colouring constituents, causing the green. Now, if, a further escape from the capillary occurs through dermis, it is red; hence the reason why the two colours - red and green - are present at the same time and in the same patch of membrane. To explain how the blue slate-like colour is brought about - or derived, are unable, unless it be due to a variety of chromidria's locally situated or due to any foreign organism contained in the inspired air, alighting on the efflorescence and then finding a suitable nidus, develop a blue fungus,
such as, is met with in cream and sterilized fluids.

The production of the efflorescent membrane is from rupture of the follicular vesicle, the provoking out of its accumulated contents, and repeated and almost incessant secretion of the same kind of a plastic or hyperplastic material, with incrustation of the same at each act of egression. The follicular vesicular production on each tonsil may not be very numerous. Then the membrane forms at various points, spreads with a centrifugal behaviour, until the processes of one or more meet, and the ultimate result is coalescence with the production of a single membrane, which is the efflorescent membrane. The result of multiple follicular tonsillitis. Sometimes the production of the follicular vesicles are very numerous, and then an efflorescence appears to form within a day, from the numerous sources of supply, which are called into requisition. At the same time as the material is poured out for the efflorescence, there is a copious flow of mucous, which continually keep the membrane covered with a clear bright-shining fluid. This fluid, further tends to prevent a too rapid drying, and by...
This means the membrane is prevented from crumbling away, guarded from the friction of the air and in part from the effects of the heated state of the tonsil. Whether the mucus is forced out by the follicles or by another part of the tonsil I am unable to ascertain.

The points of similarity and dissimilarity of efflorescence to diphtheria are:

Dissimilarity:

   (b). Whitish, grey, yellowish or faun-colored efflorescence, with patches of red or green, scattered here and there. Also the uncommon slate-blue colour.

2. (a). Dry and less mucus secretion in —
   (b). Moist and free mucus secretion in efflorescence.

   (b). Loose, non-tenacious looking membrane in efflorescence.

4. (a). Not limited to tonsil to begin with in diphtheria, but spreads upwards from larynx at times.
   (b). Does not spread upwards in an efflorescence, but limited to tonsil.
To begin with and spreads from the prone centrifugally

5. (a) Usually a raised edge in diphtheria.
    (b) Usually disappears by insensible
        gradations in efflorescence, though
        sometimes possesses raised edges.

6. (a) Diphtheria produces various forms of
        paralyses in different parts.
    (b) Efflorescence never produces paralysis
        in any part. A fact worthy of
        great emphasis.

7. (a) Albuminuria in diphtheria.
    (b) Extremely rarely a trace of albuminuria
        in efflorescence.

8. (a) Diphtheria not an indicator of
        rheumatism.
    (b) Efflorescence an indicator of rheumatism.

9. (a) No cutaneous eruption in diphtheria.
    (b) Frequent cutaneous eruptions in
        efflorescence and thickening of skin.

10. (a) The appearance of diphtheritic membrane
        on ulcerated surfaces.
    (b) The non appearance of efflorescent
        membrane on ulcerated surfaces.

11. (a) Diphtheritic membrane coughed into
        the eye, during an applicative, produces
        diphtheritic conjunctivitis and may
        extend by lacrimal duct into nose
        and thence to the ear passages.
11. (B). Efflorescent membrane coughed into the eye has little or no effect.

(B). Efflorescence usually prefers older people.

Similarity points of:

1. Position when on tonsil.

2. Obstruction to respiration through enlarged tonsils.

3. Induced morbid condition of the blood, exhibiting itself on the tonsils.

4. Rise of body temperature and hot, dry skin.

5. Acceleration of respiration; acceleration in number of beats of and force in pulse.

6. Furred, dirty tongue and usually emaciated bowels.

7. Usually scanty, high, coloured urina.

8. Often occur in damp and low-lying localities and both on the step, at same time, that is, when one is prevalent it is sure to be sooner or later followed by or accompanied by the other.

9. Most prevalent in muggy weather, especially when a high atmospheric pressure is indicated by the low level of mercury in the barometer.
To return for a time to consider the pathological changes in the blood and the effects upon the system generally. The pathological processes are essentially one, consisting primarily in alteration of blood constituents, which result in the production of an efflorescence in the throat, as the chief seat of predilection, that is to state, it is a specific disease affecting the blood. But how this specific disease is brought about remains to be considered, likewise the cause of elevation of body temperature, the derangement of stomach and bowel, the acceleration of respiration, the quickening of the pulse, the occasional perspiration, and the alteration in quantity of solid urinary elements, along with the acidity of urine. The actual cause that establishes a peculiar condition in the blood will be reconsidered under the general virology of throat diseases. At present it is permitted to view the effects caused by a certain subtle influence, probably miasmatic, material, or mephitic pervading the atmosphere and as imperceptible as the luminiferous ether contained therein, but certainly more potent in exerting its power in a medium, which it has prematurely or accidentally entered.
Effecting alteration or alterations in the chemical composition of the blood. Thereby, the blood becomes altered by decomposition, recombination, transformations, additions, synthesis or oxidation, into new compounds, deleterious in properties, capable of exciting certain phenomena, both subjectively and objectively. And these new compounds acting on certain areas to produce a controlling action, which to certain extent modifies nutrition, or changes in the products of assimilation, and the same acting as an irritant, further aids in the development of products that necessitate an accumulation of results. These results show themselves variously, to be considered herein.

The changes may one and all simply be the result of fermentative changes in the blood, brought about through inoculation of a subtle substance, malarial, miasmatic or mephitic in nature. When these changes are brought about, it shows itself by a preference in follicular or membraneous formations in the throat. The changes induced in the blood are sometimes marked by feverishness, which may be brought about in two ways, namely, first, by acting on the peripheral cutaneous vaso-motor nerves, irritating them, causing the capillaries to
contract, and to force the blood internally from the cutaneous areas, that is to state, either into the muscular areas or into the internal organs or both, producing a sense of chilliness in the skin, and its attendant peculiar discordant sensation, will in time a reaction and the sensation of a hot-flush, or this latter may be due to more powerful vaso-motor constriction elsewhere in the body; driving the blood to the cutaneous areas. Secondly the resultant products of fermentation acting as irritants in the cerebral or spinal vaso-motor nerve areas, reflexly act on the vaso-motor nerve fibrils contained in the sympathetic system in the abdomen, causing a diminution in calibre of lumen of the blood vessels, and forcing the blood into the muscular and cutaneous areas. It may justly be asked what has this reversal of conditions to do with efflorescence? It has to do with it in this way - there is a morbid influence in the blood and a morbid product, which must give vent in some shape or form. When it finds a weak point, that can conveniently be termed the seat of predilection, there it exhibits itself. The lowness, being the unfavoured or weak one, falls a victim to the exhibition. It being in a state of
inflammation, the pressure brought to bear upon it, when the great sympathetic nerve of the abdomen contracts, the blood capillaries contained therein, there must be an increase of arterial tension, which at times is well indicated by the pulse, in the fullness of it, and the tension when pressure is brought to bear upon it. The tumiclar tissue in a state of inflammation is loose and boggy to the touch generally; its capillaries are dilated, owing to the vaso-motor nerve tone of the vessels being depressed. Now it is easy to comprehend what must happen, when the afferent nerve causes the capillary vessels controlled by it, to diminish the lumen of their structures. There must be increased blood pressure, and unrestrainedly must tell more on the tumiclar capillary reticula, paralyzing the hemic structures as a natural result, which now cannot regain their tone, until inflammatory action ceases or a state of analgesia supervenes. The consequence of this is easy to contemplate—The follicles become distended or papules form, and these sooner or later to contain or be surrounded by a vesicle, containing effused serum and hyperemic material, to become altered by partition and the m-
contained contents altered or the mobile ingredients and this to constitute what I have termed a follicle. The rupture of which and the implosion of the effused contents constitute a small efflorescence, which by degrees expands in all directions by a method or process already indicated. At this moment there is no demand for repetition of the same. From the matter, hitherto written, it is more easy to conceive how the different shades of colour are brought about in the efflorescence. Having now in view the method by which the vaso-motor nerve tone of the capillaries is depressed and how a super-addition of pressure to a pernicious condition of the vessels produces dilatation and then paralysis. In this state of affairs blood pigment is allowed to escape. The molecular disintegration of the blood capillaries is aided by the static condition of state; the exuded pigment is in all probability derived through this means, and is one method of colouring the efflorescence. This, by alteration or re-arrangement of atoms within the chemical molecule of colouring matter is the agency through which other colours possibly are derived. At the same time it is not to be forgotten, that the great dilatation of the capillaries and the
extra strain of pressure within their interior, though the influence of the sympathetic nerves on the abdominal vessels, causes more pressure within the hemi-torsillar structures; thereby aiding in evolution of continuity of the vessels. The red corpuscles now permitted to extravasate and colour the efflorescence, and by alteration in the blood pigment of the corpuscles produces another shade in colour, and so on. But the loss in vaso-motor nerve tone in the tonsil also displays a way out of the dilemma,  so to how in some instances there is such a rapid production of an efflorescence. It may possibly be due to the result of the altered state of the albumenoïd molecules in the blood, acting more readily in certain constitutional diatheses, especially neurosis, and where a neurotic hyperemia is set-up. The hyperemia acting in the nerve areas, that control the sympathetic vaso-motor nerve fibrils, to terminate in showing an earlier increased strain on the tonsillar vessels. The efflorescence as a matter of course is more rapid; the membrane production likewise is quicker; and the mucus secretion greater. Herein the concomitant signs and symptoms would be sooner developed—and more readily amenable to treatment. In such instances the tonsils are more
swollen than in the sedate individual, who inhibits a power over his juvenile splitting nervous explosions. This is the view sustained by me as the method by which the follicular condition and the efflorescence are brought about.

Now to discuss the method of extra heat production in such morbid conditions and its causal reason. At first consideration it appears difficult and almost an impossibility to unravel, but I will endeavor to explain it briefly, as much as is necessitated in clearness of definition. To view the fermentative process and its effects on the albumenoid constituents of the blood in the excess production of heat. The chemical processes of synthesis, alteration of composition or of atoms within the molecule are reproductive of heat. The various organs of the body are regulators of escape of heat. Some of the albumenoid molecules within the blood become broken up, probably into products which terminate in cyan alcohol and cyan-amides, and these by hydration become converted into glycollic and lactic acids. The result of all this chemical transformation is the production of heat, over and above the natural body heat, which shows itself when the clinical thermometer...
is used, by indicating so many degrees of rise in temperature above the normal standard. The two named organic acids would in turn in a great measure account for the acidity of urine, and also in part show how the patient was to become a subject to rheumatism. There is another possible way in which similar chemical changes can be brought about, that is, the albuminoid molecule having undergone some rearrangement of atoms within its molecule, and during the time of pulmonary respiration and pulmonary changes, the altered products are converted directly into cyanocompounds and then into lactie and glycollic acid by hydration. The evidence in support of this is great, for example, why, if in a great measure these ultimate compounds are not produced during pulmonary changes, is it that in cases of rheumatism where the valves of the left side of heart become inflamed and covered with vegetations in part or in toto, and the valves of the right side of the heart run acet-pool. This is the probable evidence of the case -- the poison or morbid product, which is designated as rheumatism, is in a great measure manufactured in the lung and certainly aided by a morbid influence and without this the...
The state must remain in that of a status quo ante. Therefore the concentrated poison passes first to the mitral and then to the aortic valves, acts as an endocardial stimulant and then an irritant to the valves, and causes a subacute endocardial inflammation of the valves, which either produces an abrasion on the endocardial cells become swollen; their free surfaces thereby altered, and the morbid state of the now altered arterial blood by preference plays its game in deposition of fibrinous material on the surfaces or the free margins of the valves. Once this is begun, removal is impossible and the separation beyond command. The probable reason why—
the right side of the heart—enjoys its
freedom is this,—the concentrated poison is propelled by the left ventricle of the heart into the aorta and thence into the systemic system, and as a result part is excreted by the kidneys along with the urine; part escapes by the skin; part is deposited in and about the joints, the serous membranes, and the fibrous tissues in the body, generally for which this morbid product appears to have a great affinity and power of attraction, acting first as a stimulant—
and then as an irritant to them to end in an acute rheumatic inflammation, to be roused into activity some day or other by a sudden accession of the poison and its effects; part of the poison is lost probably by its destruction in various organs. Hence before there is a chance of the morbid product reaching the valves on the right side of the heart, the poison is lessened in quantity, more diluted, and possibly somewhat altered into another product in time to its return to the right side of the heart, which is less in activity and modifies the effects and results of the circulating poison. A matter of vital importance to the individual is this modified morbid chemical state is probably inert and incapable of further transformation by the pulmonary respiratory action. Yet this product may play a part analogous to the primary allotted one and be in no way injurious to the system, but probably beneficial and of lasting service to the constitution of which they in part are the representative. Beyond and above all this, there is a certain material germ floating in the blood, derived from the dampness and low-lying locality, which aids in determining all these changes
and the further progress of them. If only a small inoculation occurs—The system is competent to combat—With it and eliminate it in due course of Time by the natural channels. Suppose a further inoculation occurs, the system cannot combat—With it. The malarial poison then will display itself by induction changes in the blood and the result of these exhibit themselves locally. A still further inoculation would probably terminate in the production of an efflorescence and its attendant, through the altered morbid state of the blood.

The term "malarial" used is intended to embrace—A modified poison generated in low-lying districts, miasmatic, and mephitic of a general or of a local nature, that latter may be in connection with the throat—alone.

The scanty urine is due to the vaso-motor nerve constriction of the vessels in the kidney diminishing the proper supply of blood for the kidney epithelium to secrete from. It is acid from the presence of glycolie and lactic acids. It is concentrated due to the vaso-motor renal nerve constriction. It is reloaded with urates from the pyrexia—following upon the altered state in the blood and the consequent—morbid—metabolism in the muscular tissues.
The pains in the joints are due to the blood being loaded with waste and other rheumatic elements, necessitated by the state of the blood, and the reflex influence of the vaso-motor nerve fibrils, demanding the capillary blood structures to contract and force the blood into the muscles and the tissues in the neighbourhood of the joints. Of course such a state of affairs arising involves the dilatation of the vessels, then paralyses the same with an unavoidable static condition of the blood results, and an effusion of rheumatic elements, which play their irritating effects round about the joints sooner or later to be aroused into an acute state, in all respects acute articular rheumatism. It is brought about by the fact that the blood vessels have been paralyzed and never regain their original tonicity. Therefore the vessels remained dilated after the efflorescence, keeping up an extra vascular supply to the damaged parts through the means of the irritants supplied by the blood. But surely with a chronicity induced, and kept up a chronic inflammation, rheumatic condition in the neighbourhood of the joints, which on slight provocation, apart from any tonsillar one, is awakened into the —
agonizing state, designated rheumatism.
The stomach is out of order—catarrhal
and irritable—and the tongue is furred,
both of which are easy of explanation.
The catarrhal condition of the stomach is thus
induced, from the morbid state of the blood,
influencing the vaso-motor fibrils, which in
demand constriction of the capillary blood
vessels, and as a consequence a re-
diminished supply of blood to the organ.
Hence the gastric secretion is less, the mu-
cous and submucous tissues of stomach
are rendered more liable to be irritated
by food in the stomach, and as a matter
of course subacute gastritis supervenes, in
another expression, the stomach is catarrhal
and irritable. Another factor of importance
is the influence of the morbid products
now circulating in the blood, exerting their
potency on the nervous system, which either
directly or indirectly influence the blood's
supply to the roots of origin of the pneu-
monogastric nerves, directly through re-
curring spasm of the blood supplying
vessels of the part—or indirectly congesting
the part through spasm of the abdominal
arterioles, the method of how this is brought
about—being already explained. It in-
produces a subacute inflammatory or u-
irritable condition at the root of origin and this in turn reflexly acting on the distal peripheral nerve terminations of the same, or it may be that the morbid products in the blood directly act upon the distal peripheral nerve-end terminations of the pneumogastric nerves, inducing an irritable condition. And it in turn acting on the submucous and mucous gastric structures call into existence an irritable and catalytic state of the gastric organ. The patient labouring under such a condition does not feel disposed to partake of solid food, because it causes uneasiness and flatulent distension, through inability for proper digestion. Under the influence of the morbid process, the nervous system is rendered into a state below par, and the continued process, unless abated, does not permit of nervous recuperative power, such that the stomach might be more properly and better waited upon by nervous energy to render it in a fit state to receive food and in reciprocation wait upon the brain in turn by supplying proper fuel, and to defer procrastination in preference to concatenation for stomach and for brain.

The bowels become constipated from the vasomotor influence, because there is...
diminished intestinal secretion, and as might be anticipated the watery or fluid elements of the intestinal contents are not avidly absorbed; the result naturally is the contents are now more slowly moved along and will much less freedom and ease than before. Therefore from the vaso-motor alteration, from the diminished intestinal fluid, from the inflammatory state of the system generally, and the avidity that such states of system in demand for the liquid elements, the non-excremenentious matter is more slowly removed along and may even become seyballous. But another element is superadded owing to the existence of the foregoing states, that is, they influence the activity of the peristalsis by its retardation from the effect upon the intestinal muscular wall, from the effects upon the glandular secreting section and their altered state of contents.

The patient sometimes perspires freely which is due to the blood through the means of the cause stated, compelling the blood to find other quarters. When it is driven to the cutaneous areas, the sudoriparous glands perform their function, and sweat is forced out. Sometimes-
The skin is hot, in such a case the muscular areas become more injected than in the previous case, partly receiving—
the subcutaneous capillaries from their engorgement. At the same time it must not be overlooked, but—very prominently in the foreground, that— the extra supply of blood in the muscular areas, indicated—
more heat in close approximation to the skin, thereby adding heat and sustaining—
the same for the skin, which is a radiator of it. This is the reason why the skin feels hot— or genuinely hot—to the hand—
when applied to the patient's skin. Sometimes an eruption appears on the skin, which is—
caused by either the induced morbid state of the blood, produced by miasmatic, malarial or mephitic influence, acting on—
the subcutaneous and cutaneous structures in the way of developing an exanthematos—
like eruption, which at times is almost impossible to differentiate from the true—
exanthematos eruption. This exanthematos eruption might be produce in an entirely—
different— way, but having the same causall—
agent— at— work, by exerting some—
peculiar influence on the nervous system, which acts on the trophic and secretory—
areas in the brain, reflexly replies to the—
subcutaneous and cutaneous structures—through the agency of the nerves. The trophic nerves are probably caused to act by the morbid nutritive alteration and the secretory nerves to act on the submucous glands, cause them to influence a morbid secretion, which initiates the cutaneous—and subcutaneous structure to such an extent, that an erythematous rash is produced as a natural result, exhibiting itself on the skin.

This will, I think, fairly well grapple with the pathology of efflorescent—membrane formation in the throat. It was the close study of the follicular productions in the throat, which lead up to the differentiation of efflorescence from true diphtheria. This differentiation is based on at least—some three hundred or more cases. No actual account has been kept, but many weeks have seen as far as ten, fifteen and seventeen cases during one week, but some weeks I do not see more than four or five cases, and some weeks none. Therefore my estimate must be considerably below the actual number seen during a period of one year and eight months. Further, not one of the cases have succumbed to the membranous formation.
where treated before too late, which is by far more than any other living medical practitioner can work safe for true diphtheria, and is the best and safest guarantee that there are membranous and membranous forms of affections in the throat, displayed as an affection of the blood, which is a specific disease, caused by malarial, mephitic or miasmatic influence. The malarial poison may be modified in its virulence to that of the tropical countries, from drainage and improved hygienic conditions.

The period of life apparently free from the disease are infancy and the middle period of life.

Results: - Relaxation of the mucous membrane of the pharynx and enlargement of the tonsils, and as a result a short hacking cough with no expectoration. The liability to a rheumatic development and its consequent changes in the heart, arthritis and destruction of the membrane tympani, suppurative mastoïditis, meningitis or encephalitis. Often a chronic inflammation in tonsils, pharynx, palate and uvula, frequently in chronic inflammation of the vocal cords, with chronic laryngitis, and a hoarseness or huskiness of articulated speech.
The general etiology of follicular and efflorescent states of the throat.

Some how or other difficulties in the etiology are encountered which present a greater difficulty to explain, namely, whether it be due to atmospheric influence, insanitary influence or the nature of the soil or solely due to any one or two or all acting conjointly, if such is the case, is a point I will presently advert to for a satisfactory explanation. This particular kind of follicular advancing to efflorescent sore throat, the latter of which is commonly diagnosed as diphteria, I must differ from as the prognosis is good and never dangerous life when medically treated, and in many cases would get well without treatment. No paralytic symptoms of any kind supervene as a result, no embarrassment of or obidulous breathing and lastly no marked protrusion results. A much better term for follicular throat would be - infectious sore throat - as I have termed it here, a Kingdon sore throat - owing to its prevalence at all times of the year, in fact, it is an epidemic disease. Efflorescence is the
advanced stage of follicular throat and is highly infectious but not of immediate danger as in diphtheria.

With reference to the primary predisposing cause, whether to place the credit to atmospheric influence, insanitary influence, or the nature of the soil discussed from the impervious or pervious nature of the soil. First, when an inclemency of weather supervenes, this follicular condition of the throat exhibits itself as an epidemic affection, more particularly in young children and youths and adults who are debilitated from whatever cause, in this part of the Thames valley. Patients complain of sore throat with its unpleasant associates; all do not possess the follicular kind of affection, but three or four out of six or seven do, while the remainder sometimes complain of languor, debility or something depressing them, and often with a soreness or tickling sensation in the throat productive of a cough, which in a measure keeps an exciting irritant on the go, thereby preparing a suitable surface for the further development or action of other extraneous influences. Some patients who are only slightly affected do not ask to have their throats examined...
or considering I have had this so frequently, that it will pass away as on previous occasions and with such readiness as these, combined with their own method of treatment often prove successful to eradicate the discomfort. Should this fail then he or she is obliged to seek further aid, more skilful. Thus contemplating a quiet and restoration from this annoying and uneasy condition. An adventency to existing temporary condition or the atmosphere will further aid in explaining the effects due to inclementy. Take into consideration a cold or foggy day minus the cold or wet or muggy day. A foggy day with the cold succeeding to a muggy day appear to be the most favourable for the disposal of its influence, although the reversal of the atmospheric influence are equally as provocative in producing the affection as the foregoing now under consideration and will be further explained, when the nature of the soil is discussed, giving a clearer view as to how this can affect it. Wet days and its subsequent dampness are likewise favourable, but not quite so favourable. They are favourable for many reasons, namely, (d), the bed of the district is low, (B), it is
composed in a great measure of clayey soil in the deeper parts, (4), the retention by a soil thus constituted, the difficulty and slowness of escape from soil so unfavourably situated, and so favourable for retention or retardation of escape of water from the subsoil, (5), the action of a warm, close and damp atmosphere, (6), the urban and suburban smoke pervading the atmosphere. The presence of the smote is so painfully evident in foggy weather, imparting a peculiar yellowish hue, readily recognisable to anyone who on a former occasion has not had experience of it. In fact, many times the air feels so thick that you cannot imagine you can bite it with your teeth. Its effects on the eyes are to make the tears flow, the eyes smart, and to an inference, which can only be a fair inference to assume, that it must similarly affect a delicate membrane like the mucous membrane of the throat. Thereby affording evidence of a primary irritant preparing the road for exertion of other influences and the development of the follicular or efflorescent throat affections. The effect of other deleterious or irritating products pervading the atmosphere, like to produce the effect after the stage of dilution it has arrived.
at, may be placed one side as an insignificant factor. Although it ought to be considered as a partial factor of minor importance, aiding and abetting to an end in conjunction with more powerful influences. These five factors when acting in concert with other insanitary influences must be important, thus viewed, if not the actual progenitors of the follicular and efflorescent-throat-affection, they are instrumental to preparation by irritating a delicate mucous membrane and in co-operation with inclemency are aiding in lowering the vitality of the human system and further contributing to the attack.

To advert for consideration to insanitary influence, primarily mephitic in nature, most powerful in its effects whilst in a concentrated form, but subsequently becomes much diluted, so as almost if not entirely for the foul emanations to be cloaked, according to the state of dilution by the atmosphere. Sometimes the odour is modified by the foul stinks making its exit afresh escape, from its propagators or the apparently closed confinement in a pipe or some description of a drain through the superincumbent soil to the surface of the earth, more especially if
The consistency of the earth in that particular neighbourhood is close and compact, wherein it would act as a filler, total for a time and afterwards slowly partaking with its deleterious products, according to favour with other conditions, such as for example, as warmth. The nature of the earth being loose or sandy offers facility easy for escape with only slight or no alteration of sink during the process of escape. The nature of the earth being clayey causes married retardation of the process, if not a total retention, while during the progress of time slowly gives up its poison, so slowly indeed, that it has little or no effect except that in the inducement of a general malaise or slight feverishness, ephemeral in character, with a certainty sooner or later to have another attack unless a clearance out from that place. The foul stench may be derived through somewhat or much modified, directly from the sewer along the pipe into the house, or through faulty connections; rupture of a pipe or pipes through the substance of it or at its joints or both; improper disconnection; through the waste water pipe passing under the floor or foundation of the house; cesspools in the immediate vicinity; or from n — —
decomposing animal or vegetable matter too near the habitations. Personally, have known the stench from a dead rat produce many transient feverish conditions renewed from time to time with a period of freedom, to be followed with an exacerbation, prior to the stench becoming strong enough by the means of repeated and continual pollution and further concentration, to make it easier of detection by the Schneidonian mucous membrane, and have seen follicular conditions of the throat develop, both of which disappeared on removal of the cause. To quote another example similar in all intitu and purpose to the foregoing, was where several hundred weight of putrid fish were buried one yard below the surface. In muggy states of the atmosphere and humid conditions of the earth are provocative of a stench easy of detection by the olfactory bulbs and the impressions on the central nervous system. This stench in its turn on the stronger inhabitants who lived thirty yards from the place, suffered from a red rash, malaise etc., all of which were ephemeral, whilst the children, some suffering from vomiting and diarrhea, some from general malaise and feverishness, and some the younger and weaker and more elderly
debilitated by constitutional or temporary illness, invariably suffered from a particular development in the throat, and some advanced to the stage of efflorescence. I need hardly state that when the cause was attended to, the illnesses and throat affections disappeared like magic. The foregoing statements are easy of apprehension, feasible, and the truth of which can vouch for, but a question that at first sight appears to be a puzzle, namely, what about a case for quoted? The case was not on land but water and not far from the open sea, a place where the tide ebbs and flows many feet in depth. This certainly to the uninitiated or those unacquainted with the place or rather the locality where my case came from does seem a puzzle, but to those acquainted with the locality or to others when the explanation is made clear will will ease comprehend and appreciate my remark. The cause is simple and it is this, that the water of the river Thames in the locality where the case originated from, is so foul and impregnated to such an extent, after becoming the reservoir of a large amount of filth and excrementsitious matter, not solely from the city of London but from what is included under the n
general term of greater London, (the radii of which measured from Whitehall in the west, in some directions is twelve miles, and in others, fifteen miles), I do not mean to state the whole of the increments of matter from greater London, but I do mean to state a large part of the surface water is permitted to flow at high tide into the river, through the agency of flood gates. For miles above the locality now under consideration only surface water is allowed to flow into the river, which is a factor of no inconsiderable danger of contamination when the enormous traffic is thought of and the thousands and thousands of animals especially horses that are in the thoroughfares. It can only be considered to be a part of the source of the re-contamination of the whole parcel. There are many other sources of pollution that are needful for me to mention in a treatise of this kind. My object only is to indicate some of the sources to be a vindication and a reason for the reconsideration of the evidence. All the facts mentioned herein are merely to deploy the foul state of the river and to render an idea excusable in explanation of my statements productive of a means
capable to exhibit how the water is polluted, and from whence the malignant influence was derived, that caused the follicular affection of the throat. Here it is clear, the water was the agent; and the emanations from it are the cause, whose influence imparted to the system is unproductive of this particular follicular affection on the throats and in the neighborhood immediately around them. One statement more will further vindicate my statements, namely, any person passing directly to the locality, can easily detect the stench, and in many instances are made feel afeard for some days afterwards, to pass away, however, without leaving any bad effects. This is from personal experience and from the statements of the teacher, who most emphatically avers their validity and my querying and cross-examining him on my visits only led up to the same conclusion, that they all could detect the stench, that they suffered from a squeamish state, and that their bunkers had to be sprinkled with a carbonic acid powder, with the purpose of disinfection, always once in the day and often in during the warm season of the year.
in order that the stench might be cloaked or destroyed to render the atmosphere more agreeable and healthier if possible. There is another condition appertaining to an insanitary influence, secondary from point of fact, that might conveniently be included and fittingly deemed worthy of consideration under this head, for example, once the follicular condition is developed, possibly in one who is more susceptible, either through debility or probably through some hereditary weakness; it acts as a focus more particularly in a room used for educational purposes; still more so when the windows in the same apartment are kept closed during the educational training, with its members crowded, owing to the existence of offensive effluvia surrounding the place. The accumulation of extraneous organic matter from the bedding given off during the process of exhalation of breath has added to it that from the follicular throat, which is both contagious and infections in a marked degree, and it has also added the organic matter exhaled from the skin. All acting in a space of limited capacity in concert with each other to produce an exquisitely abominable smell, very disagreeable and almost—
intolerable, To bad sometimes is the breath of the patient who suffers, that saliva is
forth into the mouth in such an abundance to act as a means to clear the
mouth. It is unusual for saliva to flow
into my mouth with such freedom in any
any other condition, a fact my memory at
present fails to serve with. The extraneous
organic matter may under these conditions
as a suitable nidus favourable to the
development of a mephitic effluvia in
conjunction with that exhaled from the
follicular state of the throat, be productive
of the evil consequences which act upon
the human vitality to render it re long
a suitable habitation, aided by lowered
vitality and the further continued action
of the mephitic effluvia, primarily attacking
the system and secondarily acting locally
on the delicate mucous membrane of the throat
and of the tonsils. Therefore the concerted
action of the stench from the Thames, from
the foul breath from the lungs, aided by
that from the follicular state of the throat,
and from the extraneous organic matter,
all aid in the same common cause.
Sometimes in districts where sewers are
badly ventilated and only by few upright
shafts, there is in these places a marked
concentrated poison poured out, especially when a heavy downpour of rain, suddenly flushing the sewers and expelling the noxious gases sent up by the ventilating shafts. Such effluvia in any neighbourhood becomes diluted, and unless the shaft is well above the house, there is a probability of some of the diluted morbid gases finding their way into the houses, and more so, when the wind is blowing in the direction of open windows direct from the top of the shaft. It must, under such pressure, of necessity becomecloseted in some apartments, and the inmates from breathing vitiated air may become the subject of pellagra, constellata, if nothing worse. It is an important factor not sufficiently recognized not considered now-a-days. Another source from which the poison may be derived is manholes in the streets. And a still more dangerous one is the water in the elbows of pipes becomes dried up and allows of sewerage into the street or into the house, from wash-hand basins, urinals, water-closet pans, and baths, which is impossible, if these parts are disconnected outside of the house or the pans or the elbows bends in the pipes were kept continually filled with water and n
changed by use of the same. Another one arising from a similar cause is the gutter-grate in the street, a place where children are very fond of playing, and a circumstance which appears to innate in them. It would be unseemly and unreasonable to have water closet-pipes disconnected outdoors, hence the advantage to compel the place for water closet to be in an offshoot of the building. But other arrangements could be made compulsory to be disconnected with the main sewer pipes, if only it avert the possibility of injury of health or death. Another possible cause of danger is, the pantry or closet where provisions are kept—along side or having a slender partition separating from the water closet or where the pipes of the same, though imperfect—junction or cracks in the pipe, permit of gaseous escape and inoculation of foodstuffs with poisonous elements, where the pipes descend in the walls.

Now to reflect for a little to the nature of the soil, to be considered from a point whether it is productive or non-productive of injurious influences. First as regards the injurious influence productive of harm to the human economy, surveyed from its consistency, its character or composition,
and its dampness aided by warmth or cold. Some of these subordinate biological conditions have been partly alluded to already, but only as a passing remark, utilized to further substantiate the factors then under consideration and as a means to give greater effect by a proof to the existence of such, therein presenting to the human mind a display more easily comprehended, easier of digestion and more feasible, when the subsidiary influence was afforded in the ascendant power to clear up the contemplated difficulty.

The consistency of the soil may be sandy or clayey, or compact, or an intermediate stage between the third and fourth. The sandy, loose (owing to the admixture with sand or sand-stone) or compact consistency cannot be detrimental to health unless there be an impervious draining substratum or the bed of the place lies so low as to be subjected to variations in dampness or moisture through the variations in amount of water in the river at a given time, or the place inhabited being originally a marsh or lotter-box and then directly influenced during a protracted wet season, or secondarily through the volume of water varying.
in the river, such that in the foregoing conditions, which are not mere hypotheses but actual existing circumstances, act like a sponge retaining the moisture, due to the surface of the ground being but little higher than the surface of a mass of water, be it a moving mass of water as witnessed in a river, or a stagnant mass of water as noticed in a lake, pool, etc. It must be easy to contemplate how these last mentioned factors play a vital part in the development of deleterious products to and in the evolution of invisible insanitary gases, probably most virulent in character and of a mephitic nature, demanding the wearily vitalized human economy first to submit to its effects and secondly the robust to be up and subervient to its mighty influence, when it has attained the intensity of a scourge, extremely painful to vie. While under the unfavorable influence of such decomposing organic matter, aided by warmth and moisture, acting in accordance with the proportion and rapidity of escape would inevitably prove not only a source of great danger, but annoyance from the gradual pervading effluvia existing in the atmosphere, encouraged by favorable
circumstances, soon to exert its power. The clayey nature of the soil is by far the most important and worthy of a greater attention than has been shown, as far as my experience derived from books and my recollections from reading periodicals are concerned, is almost nil. It is a factor that is too lightly treated by many and certainly rightly when it is the sole one and nothing whatever to contaminate it, but when other insanitary conditions co-exist, to play an active and detrimental part, it must of necessity call for more careful attention worthy of prosecution to arrive as near as possible at the existing and co-existing influences to cope in a measure with problems of great perplexity and objection. It might be partly asked wherein is the perplexity, it is in explaining to satisfaction that it may be palatable to all consistent pursuers of scientific knowledge, medical or otherwise. In the first place clay retains moisture, the super-stratum is constantly kept moist and the moisture in its turn acts on the mucus membrane exposed to its influence, more especially when that moisture is aided by a warm temperature, and still more when the atmosphere is muggy, as has been previously
referred to. The clay does not permit of organic material, vegetable or animal to fill through it, and to infer with any ordinary reasoning power the condition undoubtedly will present itself in a striking manner, when the vicissitudes of the atmospheric temperature are again vividly recalled by adventance. Imagine a hot sun beaming on such a state of matters, observing the resultants, the effects of it on the constitution of the individual, who for a time is thus awkwardly placed and will without a doubt suffer from the malaise, the uneasiness and other concomitants, consequent upon the lesser condition - the follicular - or a still more - the efflorescent - or lastly the worst of all - the diphtheritic - developed upon him or her consi - without any detailed reference to slight malaise, for example, ephemeral fever and the like. The putrid organic matter, which in towns remains a week or more before removal by the dustman, in the backyards or grounds of the poorer classes, gradually being washed into the ground by the rain, to be rendered active from its latency at some future period, and to show its effects in delicate underfed, possibly improperly clad - and puny children, at a favourable season.
and at a time when there is no anticipation of danger on the part of the parents, much less of the children. Now the putrid organic matter arrested partly in the superstratum and entirely at the clayey stratum in its downward passage is not what is collected at the time, but from time to time, during the cold season, an indifferent season if such can be called, and at the time of the warmer season, more so if the weather should suffer rain upon that locality, prior to the superintendence of hot or muggy weather. The summation of the collection some day or other, sooner or later has to display its tender kindness on one or more individuals who are unfortunate occupants near to it, or who unfortunately are promiscuously over it. The sooner such an accumulation is dispersed the better, and the less the evil consequences afterwards to follow from the after gradual disengagement of the remains if any there be. As a matter of course the longer it remains, the more virulent must the poisonous incubated effluvia be and the less of it would be necessary to produce its results. These two latter deductions must clearly explain for themselves of danger and no danger
and of how much more the danger connected
with the former would be less owing to less
virulence and more dilution during in-
halation and of how much greater the
virulence of the latter even though diluted
would be, because the alteration of the
decomposing products would assume a
more powerful if not tenacious character,
when added to the atmosphere then being
polluted and inhaled. Because of the
elements generated by decomposition or by
alteration, attenuation or non-attenuation
or intensification by incubation of the
virulence, material, miasmatic or miasmatic,
whose influence on the blood, when in
inoculated into it, rather indirectly by
means of absorption through the pulmonary
bronchial mucus membrane or directly
into the hemie vessels or the lymphatic
channels, or both, or all combined, is to
induce a peculiar change, which has
been fully considered under the heading
of pathology of efflorescent tonsillitis.

Therefore to conclude, the actual cause is
the agent in producing a disease, affecting
the blood, primarily specific and probably
fermentative, to choose by predilection for
exhibition on the mucus membrane or in
the submucus tissues of the tonsil or its
annectant mucus membrane.

Another cause that might be appended to the general pathological attributes contained under efflorescence now terminating, is the possibility of a local agency in connection with the results of the decaying of the parenchymatous tissue of the gums or the teeth, or in connection with caries of the teeth. Also of a destructive follicular inflammation in the part with effusion of blood, readily becoming putrid and acting as a local focus of danger within the precinct of the throat. These are only small potent factors but would aid in carrying down the balance on the wrong side, when other deleterious and dangerous products are inducing a state of morbidity by intoxicating and invading the system to the very brink of the precipice, and then hurrying it on home to discharge its unwelcomed and morbid personal function.

Before proceeding to treatment, a case which was diagnosed as diphtheria and was not is attached, out of the many that have personally come under my care. Then a few irregular and extremely interesting cases, which will in time prove of the utmost value and interest to the medical profession.
Case 1. Follicular tonsillitis diagnosed as diphtheria. W.B., aged 26 years, who acted in the capacity of teacher on a mercantile vessel, lying in the Thames, of Greenwich, in November 1885. He came to his father's home a distance of thirty miles and was said to be suffering from an inevitable attack of diphtheria. Fourteen days prior to this, a death occurred on the same mercantile vessel and was certified as diphtheria. The reminiscence of which caused a great consternation in his mind, with perhaps some influence on the decision which was concurred in for his departure home by the surgeons in attendance. From the time of the death already stated until this sore throat had occurred, which required a called for attention. When on examination of nine boys, two surgeons in attendance certified to be suffering from diphtheria, out of the whole parcel. The above has been mentioned and carefully noted as it has some bearing on deductions anteriorly made.

To return to the teacher, who personally came under my supervision. It is the case that I particularly desire to note, with the addition of stating the existing condition of the patient on attempted phonation and —
complained of a soreness and rawness in his throat, more especially on the lateral aspects, also of a slight headache and un

dryness. There was no excitable circulation or increase of pulse, volume or irregularity in the beat or rhythm of pulse. No alteration

of mechanism of respiration, or any enlargement of submaxillary or sublingual glands on either side or any tenderness on pressure

or attempted mastication. The tongue was slightly coated, which was little out of the ordinary. On examination of throat by

artificial light, both tonsils were enlarged and inflamed. The right-only was enlarged and inflamed with a suspicion of four or

herpetic places, while the left was enlarged, inflamed and the posterior of five disseminated follicular prominences, whose appearance was

of a grayish green colour, with yellowish irregular periphery. Four of these - follicular prominences appeared to be over

sunk to the extent of involving the substance of the tonsil, while the fifth one which was the lowest and anterior, appeared to rest on the surface of the mucous

membrane. These patches are usually not very difficult to remove; they are tenacious and possess a certain amount of elasticity. On application of an -
eachawtic, by means of a camel's-hair pencil, the condition is readily demonstrated. The -
in removal accomplished, its base, that is the part beneath the patch touched with the-
same application, usually puts an end to-
the follicular eminence formation and causes-
no further trouble like a diphtheritic patch would by its reappearance in the same-
position. After this slight depression to -
continue with the condition - the uvula was-
inflamed, reddened and pendulous, otherwise-
it was free from follicular state or efflorescence. On the following day the right tonsil which-
prevented the appearance of a herpetic -
rash was replaced by four sunken-
follicular patches similar to those on the-
left tonsil. Now both tonsils were bright-
will mucus but not that glairy mucus-
so characteristic of diphtheria. The-
patient was well again in four days-
and returned to his work in the fifth-
There was no concomitant paralysis, no-
yet any developed since.

Case 2. Efflorescent-Tonsilitis.

W.B., aged 22 years, by occupation an-
engineer cleaner on the London and South-
Western Railway department. On the re-
masternal side there is rheumatism, while
On the paternal side there is gout. The mother stated that they at home believed their son was suffering from rheumatic fever and a sore throat, with aching pains all over the body, more particularly in the lower extremities, and a red rash. On oral examination the subjective symptoms were aching pains in the limbs, more in the joints than in the muscles and more in the lower extremities than in the upper; flushes of heat, cold and perspiration, and a red rash, which was a general erythematous blush of the skin, disappearing on digital pressure, to return, however, on removal of the same; of tinnitus aurium, vertigo and headache; of a bad taste in the mouth; and of a soreness in his throat when he swallowed. The subjective phenomena had steadily progressed for the worse for eight days.

The objective symptoms were: an excitable rapid pulse, imperfectly filled, exhibiting signs of want of volume, 120 beats per minute; temperature 102° 3 F; a skin covered with the above named erythematous blush and very dry and hot to touch; tongue very dry, covered with a thick brown fur, and large with indented margins; breath abominably offensive;
bowels no reaction for four days; physiognomy displays great anxiety, slight protrusion of eyeballs, and a dread of something. There was owing to a case of diphtheria proving fatal in a street running obliquely to the abode. Cervical, submaxillary, and sublingual glands were normal in size, but slightly tender on pressure and on attempted mastication; the tonsils were both enlarged to the size of a walnut; the anterior pillars of the fauces had at this time apparently coalesced with the tonsil; the uvula about three times the natural size not only in length but in circumference also. The tonsils were irregularly inured, presenting the appearance of an acute exacerbation superadded to a chronic condition. The surface of the tonsils were entirely covered with a pumice yellow membrane, resembling more a light green colour, extending down into the larynx on the right side, but limited to the whole surface of the tonsil on the left, while on the right side it had extended about two-thirds of an inch in advance of the position of the anterior pillar of the fauces, and it had a length of about five-eighths of an inch. Some parts of this membrane appeared to be riding on the surface of the mucous membrane and other
parts to be embedded or sunk into it. This appearance was due to the inundated surface of the tonsil, where in reality the membrane was not rising throughout on the surface as was subsequently shown during the progress of the case. The mucous membrane of the tonsil did not bleed, when part of the membrane was detached. The edge of the membrane by gradual centrifugal thinning became insensibly lost, the free margin of it does not involve the mucous membrane at first but afterwards. The uvula was free from a membrane formation but was edematous with serum, the result of inflammatory action. The posterior wall of the pharynx possessed two large membrane of a tawny colour with a greenish coloured spot in the centre; the size of the speck was about an eighth of an inch in diameter. One membrane on the right pharyngeal wall was perfectly uniform in shape, the concave surface of which was inclined to face the middle line; its longitudinal diameter was oblique. The size of this membrane was about three-fourths of an inch to a quarter of an inch. The membrane on the left—posterior pharyngeal wall was a little larger than the plane surface of a split pea, in all respects resembling the one on the opposite
side, except in shape and in containing less of a tawny coloured membrane at the periphery of the green coloured spot. The surface of the mucous membrane of the posterior wall of the pharynx, and over the membranes, also on that of each of the tonsils, and for a quarter of an inch external to each, was covered with a clear, transparent, bright, shining mucous resembling in all respects glycerine that has become of a thicker consistency with cold. A condition in a much less severe form existed on the soft palate in a more undeveloped state than that of the other parts of the throat; the undeveloped condition depicted itself in the follicular variety. The part of the soft palate involved was situated a little posterior to and a little nearer the medial line than the point where the posterior palatine artery emerges from the posterior palatine foramen after passing through the canal formed by the superior maxillary bone and the external surface of the vertical plate of the palatal bone. The follicular development was beautiful as illustrating the primary stage, in this manner, offering to view an amphitheatre-like or wheel-like arrangement, in the centre of one a very small vesicle filled with a semi-translucent fluid, and...
and this succeeded by a bright-red zone, whilst another still brighter zone was outside of it, which in its turn gradually faded away until the colour of the part could not be differentiated from the surrounding part. The tripod arrangement is an excellent example of the primordial state and the precursor of the follicular and efflorescent developments. The blood vessels in the immediate vicinity of the primordial state were dilated, visible and prominent, running into the middle red zone, there to become lost. Other of these wheel-like arrangements had a central vessel filled with leucocytes, multinucleated, each leucocyte was half as large again as a red blood corpuscle, and easily visible under the microscope of medium magnifying power. Other vessels were more part-harder and nearer the median raphe, from which no fluid escaped when pricked, with the eccentric zones most imperfectly marked. These peculiar wheel-like arrangements existed on both sides of the median raphe posterior to the posterior palatine foramina.

Under treatment and on the following day, the membranes on the tonsils were diminished one half in dimensions and completely on the second day. Those on
The palate disappeared on the first day of treatment, whilst those on the posterior pharyngeal wall remained unaffected until the third day and vanished the following day. The appearance offered to view on the soft palate where the vesicles were situated is well worthy of note, namely, the appearance and then the disappearance of the vesicles, and then the follicles to leave as an indicator of the past, a small punctiform bright-red spot, from which no visible fluid exuded, while the other part of the wheel-like arrangement was beautifully marked, though a little less pale, apparently only perhaps owing to the very bright puncta in its center. The congested and visible vessels were now invisible. When the membranes disappeared from the tonsils and the posterior wall of the pharynx, they left the mucous membrane blanched, just as if the mucous membrane was poorly supplied with blood and an hydropic state predominating under it.

In an adjoining house to where the above case occurred, two sons were attacked with the follicular kind of throat, which were probably due to atmospheric changes being foggy and muggy at the time. Two daughters in the same house as the case of efflorescent membranous tonsillitis were attacked.
with particular consilium, but it could not be stated positively, whether they were infected by the contaminated air in the house or inoculated by the state of the atmosphere and its contents during the foggy and muggy state of the atmosphere at the time.

To show that the case quoted was not diphtheria, there was none of that peculiar emaciated breathing with rising and falling of the thyroid cartilages and its adnexa, neither was there twelve and a half months subsequently any paralysis of any kind developed, but at the expiration of four and a half months, the patient suffered from acute articular rheumatism and a relapse three months later, with copious deposits of triple phosphates in his urine and urates and the characteristic swelling of the larger joints with the fleeting and returning pain variable in its intensity associated with other concomitants of the rheumatic condition. After the second attack, he is very short of breath, pants and puffs with exertion and is very much emaciated in the respiratory function. He is pale and becomes very paled with work. The state of his heart is as follows - the transverse diameter on percussion would measure from just within the right -
parasternal line to nearly one inch external to the left mammary line on a level with the nipples, and one inch on a level of half an inch lower than the nipples. The longitudinal diameter in the left parasternal line is on a level of the inferior margin of the second left costal cartilage.

On palpation the apex beat is weak and diffused, very slight pulsation in the xiphisternum is transmitted through the left lobe of the liver, and none is palpable in the epigastric notch or in the other inter-costal spaces. On auscultation - vital area. First sound was accompanied with a very short, soft blowing muffled murmur, with a strong suspicion of a presystolic murmur, which later developed into a loud, rough blowing murmur, loudest heard about one inch internal to apex beat and one inch above it. The systolic murmur was propagated to apex beat of scapula backward. Second sound marked reduplicated and a tendency to become booming.

Aortic area - First sound accompanied by a slight, soft systolic murmur propagated to and more audible at the right sterno- clavicular articulation. Second sound, reduplicated.

Tricuspid and pulmonary, there was a
soft-first sound but no audible accompanying it was slightly prolonged. Second sounds reduplicated but soft in character.

A remant, pure, on this case would not be considered inconsistent or inappropriate, for example, the certain connection of this affection with acute rheumatic arthritis, as it is evident the efflorescent membranous tonsillitis was the precursor of the rheumatic disesase, just as much as tonsillitis in many cases is. Again it must be kept in mind the young man inherited a rheumatic diathesis from his mother.

Case 3. Follicular Tonsillitis, otitis and acute encephalitis.

The following description of a case is one in which the cause of encephalitis can be placed to an attack of acute follicular tonsillitis with subsequent production of destructive changes in the middle ear and this in course of time followed by symptoms, which were only fully developed about six days prior to death with no signs of meningeal inflammation, and that the prick from the point of a pin inflicted upon the sole of each foot, save the ball of the big toe on its plantar aspect, did not provoke wining, nor yet of any part of the body, with the exception of one.
The side of the neck, over the mastoid process of the temporal bone and about one inch above the longitudinal and transverse axes, which on the corresponding side caused dilatation of the pupil, while touching the cornea or sclerotic did not evoke any movement of the eyeball or alteration in size of the pupil. The case would have been more complete and more unique if circumstances had permitted of a necropsy.

Bertha W., aged two years and three months, on the 24th November 1884, said to be suffering from difficulty of breathing. Her parents were greatly alarmed and thought she would be suffocated; they were nervous, more so, apparently, as they had lost their other child in a fit and this affected child being the only one. Family history good, with no evidence of tuberculosis or syphilis. It was evident from appearances, that she suffered from obstruction to respiration, breathing with mouth open; face flushed; eyes prominent and suffused, with hands and feet covered with perspiration. When mouth was closed, the all nasi from increased respiratory effort were called into action. The pulse was regular, full, not rarely compressed and 120 beats per minute. Temperature 99°8 F. Respiration 22 per-
minute. Tongue coated with a white fur; breath very offensive; tonsils follicular and much swollen, very red and almost melting in the middle line; uvula red and oedematous. Soft palate posteriorly shows inflammatory action; appetite very much impaired and refuses food; bowels regular. At the expiration of seven days' treatment, the child was practically well, with the exception of a slight enlargement of tonsils which remained.

On the 12th of December 1864, she began to show signs of uneasiness in the left ear, complaining and frequently rubbing the lobule. There was no tenderness over the mastoid cells. The external ear presented nothing abnormal, but the membrana tympani moved to and fro, the movement being synchronous with the radial pulse and more marked at the posterior or inferior angle of the membrana than elsewhere; the membrana did not bulge. This condition of the membrana continued for four days and on the 20th December 1864, hemorrhage from the external ear began. Undoubtedly resulting from the extension of the inflammatory process from the pharynx to the tubal cavity, thence to the inner ear and the membrana tympani to affect the latter structure, causing ulceration and subsequently hemorrhage. On examination
of the membrane an ulcer was easily detected, apparently having commenced in the centre, and continued to be destructive until the whole structure was destroyed. The destructive process was replaced by a serous discharge, which continued only varying in amount from time to time; sometimes it completely ceased, but to begin again by the slightest provocation will cold. When the serous discharge was in abeyance, the uneasiness in the ear returned, but, when the discharge returned, the uneasiness usually, though not always ceased, and, at such times, the more the discharge, the less the pain, if not absent; it was little influenced by remedial measures.

On the 5th May 1885, the child had an attack of vomiting, which was not at determined by the ingestion of food into the stomach, nor, by the thoughts of it or the sight of it. The tongue was coated with a whitish fur, red at tip and along the margins; it was not tremulous nor moved spasmodically. No other abnormal prodromal sign or symptom was noticed.

On the 11th May 1885, she was fretful and irritable. Any noise or sight of a stranger caused her to be more fretful and more irritable with a greater i
excitation of circulation accompanied by no irregularity. No dread of light and pupils reacted both to accommodation and to light. Temperature 99°4. Pulse 120 regular and compressible. Bowels obstinate. No loss of vaso-motor control; skin reflexes no more sensitive but not unduly so.

On the 12th May, 1875, a new symptom presented, namely, a tremor of muscles on anterior aspect of right forearm, which sometimes went to the extent of movement of the fingers, but no such tremor or movement was noticed in any other part of the body. The face was flushed and pilaeid, and forehead feels hot. No delirium, muttering or convulsions. I was unable to ascertain if any impairment to taste or if alteration in quantity of saliva occurred; the object of this was to determine whether or not the chorda tympani nerve as it passes through the stylo-mastoid foramen across the middle ear from the base of the pyramid to the stylo-mastoid foramen across the middle ear from the base of the pyramid to the stylo-mastoid foramen, or whether the covering of the nerve derived from the internal lining of the ear were implicated by the inflammatory process. Pulse slower, number of beats reduced from 107 to 80 per minute; easily compressed. Evidence of loss of vaso-motor control; a greater tendency to sleep; she lies listlessly.
in bed, takes no notice of anything.

On the 13th May 1885, gradually passed into a state of coma, which became more and more profound to terminate in death five days later. During the last four days of life the pupil were of equal size and medium. She was unable to swallow, totally insensible to pain inflicted with the point of a pin, save the plantar aspect of ball of big toe on each foot, and the side of the neck over the mastoid process and about one inch below it—in the longitudinal and vertical axes on each side the latter of which caused the pupil to dilate corresponding to side on which the pain was inflicted. The sclerotics and cornea were insensible to touch and produced no alteration in pupil. At no period could Troussseau's Jacke Cerebrale be produced, although for three days loss of vaso-motor control was evident from the occurrence of extensive blushing, whenever the skin was touched and sometimes independant of that. The independant bluss was most marked between the hours of 9. and 12. a.m., as much so, that the face and forehead became a bright-scarlet colour. The rate of pulse dropped as low as 63 beats per minute. For three days Cheyne-Stokes' respiration was well marked, sometimes two cycles per minute.
and sometimes two and a half. The abdomen was relaxed, the faces and urine were pressed involuntarily, the former after administration of purgatives. Throughout the illness there was absence of albumen and sugar in the urine.

To this, could append several cases of efflorescence, which caused otitis and consequent destruction of the membra tympani; necessitating the opening of the mastoid cells, both cases recovered, that is, in two of the cases, which culminated in suppurative mastoiditis; one of the cases has been described beforehand, under the section of result.

Case 4. Follicular Cataritis: Efflorescent-Influenza, Pharyngeal and Laryngeal Diphtheria.

The weather at the time the disease set in was very foggy and had been for six days; it was raw mornings and evenings, with an inclination to be muggy in the middle part of the day.

On the maternal side of the case now to be quoted, the rheumatic element prevailed in a chronic form. The parents of the boy, with their family, migrated from Ipswich in search of work, five weeks anterior to the boy's
illness. Since their arrival here, they have lived in a part of the town which a few years ago, prior to being built upon was a marshy district. Several of the children have complained of a sore throat; the one in question, G. H., aged three years for about three weeks, none of the family received medical attendance since they arrived at their new home. G. H. was a fine, strong, made, ruddy faced boy with an apparently strong constitution; for three days he had complained more than usual of the soreness of his throat — and the difficulty of swallowing, there in conjunction with the labouring - breathing were the cause why medical aid was summoned. On arrival an alarming state of matters was self evident. The boy was breathing with mouth wide open. The breathing was much labouring, in fact it was stridulous; the circulation was flagging; pulse almost imperceptible at the wrist; the tissues were blue beneath the nails; hot of ear and lips began to show signs of initiation of cyanosis; eyeballs slightly protruding from their sockets; forehead beaded with perspiration; tongue was very dry covered with a thick white fur; roof of mouth posteriorly had nine follicular prominences yellow in colour, fire on the left-half and
fours on the right half; the blood vessels were enlarged, prominent and visible, approaching at different parts to the follicular prominence in the peripheral red part of a wheel-like construction, red in colour, with a bright scarlet middle zone and a central part containing a yellow papilliform-like nodule. The follicular vessels about one sixteenth of an inch in diameter, raised above the palatal mucous membrane. The right tonsil was enlarged, the possessor on its surface of a smooth greenish yellow efflorescent membrane, with its peripheral part passing by insensible gradations upon the surface of the tonsil to be lost before reaching the peripheral part of the structure; it was not covered by mucus but dry. The left tonsil was enlarged - about half the size of the right one, reddened and had two yellow follicular vessels upon it; there was no efflorescent membrane on this tonsil. The most formidable part of the case remains now to be depicted in writing. Thus, the whole posterior wall of the pharynx, extending into the nostrils - posteriorly and as far down the throat as could be seen an ash grey leathery looking membrane covered with a bright glairy fluid which had a glazy aspect rendering a very clear view for visual scrutiny of the structure.
beneath it. This kind of membrane was to be seen on the lateral wall below the tonsil, extending down into the laryngeal box. While the epiglottis and the parts adjacent to it were also covered by a similar membrane both in aspect and with mucus. Six hours later both tonsils were involved and invaded with a similar kind of membrane covered with the glairy mucus; it did not extend to the fauces. The boy died ten and a half hours after the first visit. The operation of tracheotomy was refused for relief of the child. No post mortem could be obtained as the parents were Irish Roman Catholics. He died asphyxiated from a formidable disease—diphtheria—which might have been obviated if medical aid had been summoned earlier, as the case from appearances undoubtedly originated in follicular vegetative formation, progressing to efflorescent membrane formation as a result, and as a subsequent consequence, caused by organic changes on the tonsil, vitiating the inspired air to such an extent, that it in its turn found access into the system, to further degrade the blood, and to reduce, impoverish, alter, and develop unfavourable conditions and transformations, eminently suitable for a rapid development of a diphtheritic membrane. Once this state is—
fully established, the human system soon yields to its invader, as insufficient to cope with its intruder and destroyer, which has no respect either for person, race, or locality.

The short duration of the case, its rapid progress advancing to destruction, prohibited a fuller investigation, which might have proved of vital importance in elucidation of facts so earnestly and eagerly sought-after by all thoroughly conscientious scientific medical observers, to place their subject on a pedestal, firm and not to be approached by imagined a theoretical hypothesis, and thus placed it will withhold all arguments of an unmanageable character, even though they be promulgated by an authority whose ability remains unimpeached in a certain walk of life.

It would have proved a case of extreme interest could it have been watched from the beginning to the termination of the case, but such is impossible as no follicular formation or its subsequent efflorescent membrane or formation could be produced, if properly treated. Provided such could have been observed, it would at once prove, in fact, absolutely prove the direct-connection between the varieties of membraneous throat-affectons, their method of advance from one variety.
to the other, the time it would take to develop from one to the other, their relative characters and to be able to estimate the degree to which the human system was involved, in preference to forming a judgement solely from the visual appearance in most cases, thereby evoking judgment on a scientific basis. This judicature would epitomize if it did not actually abridge these different formations as an inexcusable differentiation between a disease and a symptom with its corresponding value attached, during a survey of a contaminated or tainted part. The result of some inoculation into the system of a condition already narrated.

Case 5. Efflorescent Tonsillitis. Diphtheria.

Miss H., was often subjected to pharyngitis and tonsillitis with efflorescent membrane formation on the posterior wall of the pharynx. The glands when inflamed are swollen, reddened and about the size of a pea; the mucus membrane of the pharynx is acutely inflamed. The tonsils are enlarged, inflamed, and on their centre a greenish yellow colored membrane with a yellowish appearance towards the periphery. The level of the surface of the membrane is below the mucus membrane when considered
as covering the tonsil. The pharyngeal and cornellar affection caused much annoyance by unpleasant sensations, such as, a sense of heat and dryness, sometimes cough, but always pain varying in amount, apart from and accompanying the act of deglutition. There was neither dysphagia nor aphonia but exaggeration of pain when attempting to and after completing the act of swallowing or of phonation. At such times as the existence of throat mischief, particularly irritation was present, with a dry tongue along with slight enlargement of the submaxillary and sublingual glands. Several days before, during, and several days following the period of the catarrh, the pharyngitis and the pharyngeal glandular enlargement was most marked, accompanied with tonsillitis, but without the efflorescence on the tonsils or the enlargement of the submaxillary and sublingual glands. During an attack of efflorescent tonsillitis, a son of hers, aged three years, became a subject to the development of a somewhat similar condition on his tonsils; the membrane presenting exactly the same appearance as the one already described. The boy complained of his throat— one day and a few days later more so, to which very little attention was paid; the following day he was seen in the course of the afternoon and efflorescent tonsillitis with very
slight constitutional disturbance of any kind was diagnosed; the moist condition of the remaining part of the tonsil and pharynx was not of a glairy nature nor mucous like; it was so on the second day of examination replaced by a leathery, greyish while membrane covering the tonsils, the absorbed pillars of the fauces, and extending on to the soft palate, looking as if it sat upon the foregoing structures; the free margin of the membrane was slightly elevated and showed no signs of sinking into the mucous membrane. The submaxillary and sublingual glands were much enlarged on both sides. The breathing was peculiar, unembarrassed, somewhat stilted in character, and resembling that particular kind of respiration met with in cases of diphtheria. In half an hour subsequently the child was narcotized by the induced respiration and in deficient elimination of carbonic acid gas and other deleterious organic products from the blood. The lips, nose, tubules of ears, hands, fingers, feet and toes were purple; eyes were congested and turned upwards. The condition had attained a degree very formidable and with great rapidity as to cause very great anxiety; it was such that the parents were willing to submit to anything to relieve or cure the child. Accordingly, an operation

...
was suggested and responded to with no demur. From the urgency of the case and no assistance at hand I was obliged to perform the high operation of tracheotomy, alone; it was performed in the ordinary manner, waiting until all bleeding ceased prior to dividing the crico-thyroid membrane and the two upper rings of the trachea; this achieved Crani's forceps were used to obtain a view of the tracheal mucous membrane, which appeared free from the diphtheritic membrane and healthy, although three diphtheritic membranes size of a threepenny-piece were coughed up. Immediately the coughing ceased the tracheotomy tubes were introduced; the breathing at once was easier, with recovery of consciousness in fifteen minutes; the diphtheritis rapidly disappearing and showing signs of a favourable recovery. Two hours later the pulse began to flag, a result of the action of the poison concentrating to produce cardiac paresis, which by gradual recession produced further atonement of cardiac muscular power, to terminate in death by complete cardiac paralysis. Death ensued eight hours after the operation. He died suddenly and unexpectedly of those around him, when he sat up and fell back dead in his chair.

Neoplasia. The soft-palate and tonsils were
covered with a diphtheritic membrane, extending down to the rima glottidis in the larynx. The anterior and posterior nares, trachea and bronchi, and greater part of the pharyngeal wall were free. Otherwise nothing else abnormal. All the cavities of the heart were distended with blood, more particularly the right side, which with the weakened heart and the exertion of sitting up caused sudden death. The foregoing description of a case is one in which death occurred twenty-five and a half hours after the boy was first seen, with the appearance of efflorescent tonsillitis and a subsequent development of diphtheria apparently from an efflorescent tonsillitis of the mother.

The mother on several occasions had been cautioned not to fondle her children as such a condition of the throat was infectious and might infect them, with a serious result. She, however, became careless and thought that they were insusceptible to the affection, unfortunately, this idea has not been found correct as substantiated.

The importance of this case and the lesson to be learnt is that from an efflorescent tonsillitis, a poison may be generated, absorbed and produce an alteration in the constituents of the blood, which may culminate in the development of a formidable and a very
deadly disease. The case in the early stage was seen by a practitioner of matured experience, he has been twenty-five years in practice, who considered the affection to be one only of ulcerative (that is membranous) tonsillitis, without the remotest idea that ever such could develop into diphtheria, in fact, it is a multitude which he often discountenanced, whenever such a suggestion was made. I am fully aware that many practitioners will, with a great amount of reserve, countenance this, and be inclined to say, that it was a case of diphtheria not recognized from the first. However it was not diphtheria at first, but rapidly developed into it. It may be that this particular kind of effusive tonsillitis might be a preparatory stage, both suitable for and capable of generating by destructive processes of a minuscule nature, or that it might be a modified diphtheria. Again, the membrane was of rapid development, consequent upon the sunken effusive one, and that the latter affection was the cause of the alteration in the blood constituents, which materially facilitated, if, not actually, the exciting agent. The altered state of the blood going pari passu as a concomitant would soon aid in generating products capable of rapid destruction of vitality, with death coming a little later. Moreover the absorbed poison and
That resulting from the subsequent diphtheritic membrane acting together by concentration on the nervous system, so as to influence the reflex mechanism of the heart, or acting directly on the nervous mechanism of the heart, causing first a weariness, then a paresis and a consequent attenuation of the muscular fibres of the same organ; that the power of the fibres on the influence of the nervous mechanism on the fibres are rendered deficient, to such an extent, that, on the part of the patient, a sudden raising of the body into the sitting posture, coupled with the increased strain thrown with the increased blood pressure within the chambers of the heart, caused a paralysis which was complete. If such a view were proved to be and contemplated, then it would of necessity involve the acceptance of a formidable disease, primarily a blood poisoning, which weakens the system to an indefinite extent, rendering the parts to be more liable for display and very favourable for the rapid development of the membrane and its consequent results. This idea would attain for itself a certain amount of support, as showing how quickly the poison can exert its effects, when the constitution is favourable. Then would arise the question, can we consider or class diphtheria as primarily a local one and then a general
constitutional one from concentration of poison in the system or as a general one to be followed by a visible local development. For my part I cannot conceive why it should be dealt with primarily as local, because the constitutional disturbance of the individual is only suspected and the practitioners to return again in a few hours to look for the diagnostic sign in the throat, without which he hesitates or withholds his opinion in the face of his imagination. Hence the consideration of a primary local disease must be put to one side, because of our inability to decide from constitutional symptoms.

With reference to the disease being first constitutional and then local. The difficulty to decide this is great. Our means at our disposal are not sufficient to warrant a positive answer but argumentative display may necessitate a careful consideration. The first difficulty of contention rests with the ascertaining, whether it is essential or not for a primary lesion of continuity of the mucous membrane to act as a focus from which the virulent poison can be absorbed, then carried into the vascular system, where it finds a genial habitation for the ravishes of its development, or the products, the result of its development, to exert its influence on the
on the nervous system and secondarily to affect other organs or tissues. The effects of which are to greatly lower the vitality of the animal economy, and now the parts already lowered, particularly those of the throat as described before, are favoured by exudation of a peculiar plastic lymph first in the tonsils, then spreading to the parts in the immediate vicinity, and general to the development of, and extension of, the membrane, yielding beneath it a huddled surface, varying in extent according to the size of it. Therefore, a greater raw surface and further absorption of the resulting poisonous products, to exert its powerful influence, in addition to that already exerting its power. In favour of this idea is the case that is taken to avoid detachment of the membrane, as another membrane soon forms, with of course, the greater risk of a more rapid absorption, and further constitutional effects. The patient is treated from the beginning of the recognition of the disease with stimulating diet, alcohol, iron, and such as is best calculated to guide through the time of its virulent effects. This once passed, then the chances of recovery are decidedly in the ascendancy. It is not like a chronic irritable disease, where the question of treatment is a prolonged one and where dilatoriness makes
little difference to the case. Moreover the principle of treatment is not to be compared to a local one. It must be energetic and prompt, if the constitutional effects are to be combated, at the same time the local application is persevered with to prevent spreading and to destroy any poison generated, to save the various organs any further increase of expenditure of energy, and thus to help them to stand against consequent inoculations and to cast off or to destroy the offending agent and the products generated thereby. Again it is difficult to conceive why, if not constitutional, the poison concentrates in the nerve centres or along some part of the course of the nerves, producing in some patients, *paralysia of larynx, of oesophagus, of soft-palate, of accommodation of the pupil, of paraplegia or locomotor ataxic phenomena*, and why in the space of about six weeks time these conditions disappear, and why these post-diphtheritic nervous affections, in some individuals, follow on a simple sore throat, with no formation of a diphtheritic membrane and with little or no constitutional disturbance, beyond the slight sore throat and a very slight ill-defined feverishness. When evidence such as this can be brought to bear on the subject, to a certain extent must annul the idea of the disease being primarily local. It plainly—
shows there was the element pervading the blood, the condition of the throat favourable, if slight soreness be considered favourable. In this the syphilitic was either able to destroy or eliminate the poison and when no further accretion of poison and no obstruction in the throat, the patient was soon able to throw off the effects, with the result of being able to follow his employment throughout. As an example to verify the statement — I well remember Professor Stewart of the University of Edinburgh, describing a case, which had been under his care, where a patient with all the symptoms of locomotor ataxia, followed on a simple sore throat in an engine driver, who resided in a district where there was a prevalence of diphtheria. Some months after the sore throat locomotor ataxic phenomena were developed, only, however, to disappear again and the patient to return home cured of his ataxic phenomena. The fact is one well worthy of recapitulation.

It is equally possible for a miasmatic poison of virulence to be generated in the throat, from an ulcer on the tonsils, as it is from sewer gases. The danger in the former would be much more favourable than the latter and less likely to give rise to symptoms so sudden at the commencement, though if
equal severity in the later stages of the disease. The formation of the membrane in the throat indirectly from the mucus within it could very easily be conceived because the blood would, for a few days, have been gradually inoculated; the animal economy reduced by the preceding influence of the poison, and the throat prepared, through the means of the lesion of continuity and the effusion of a peculiar lymph. I am aware diphtheria is usually related to originate from sewer gases, granted this, but there can be no reason why an efflorescent membrane on the tonsils, situated at a place most favourable, where by the respiratory acts, air is caused to play continually over the surface, and it being moist, any particulate deleterious or non-deleterious would, if they come in contact, adhere; favour the changes in the membrane, and the noxious products produced are rarely absorbed, whilst a continuous production of the mucus goes on. The deleterious products which with a healthy surface are non-deleterious, may now be actually deleterious from the exposed unhealthy surface. There can be no valid reason why a membrane thus situated should not develop on a minor scale compared to the sewer, products equally as injurious and dangerous to health, the effects of which are conclusively drawn from the
result. Again a person suffering from an ulcer or ulcers on the tonsils, have in their breath a most disagreeable and very offensive odour, apart and separate from that derived from constipated bowels or decaying teeth. In the majority of cases of efflorescent tonsilitis the breath is loaded with foul effluvia, such that one fancies, that it can actually be tasted. This shows there are some destructive changes, producing the obnoxious effluvia, which is respired; and such an obnoxious effluvia is highly infective and capable of exciting efflorescent tonsilitis in another individual. I have repeatedly observed this to occur, and in the majority of cases it is accompanied by high fever, irritable and accelerated pulse, foul tongue and other signs of a feverish disturbance; all of which under appropriate treatment and a local application outside in a few days; but if neglected and allowed to run its course, it might result in diphtheria. Some cases I have seen in advance as far as dyspnoea, but were easily and readily ameliorated by treatment. Hence the conclusion that diphtheria is not a local disease, but in a peculiar specific blood disease, and is produced in a way similar to an efflorescence, through induced constitutional changes, and is akin, if not brother to efflorescence.
My experience in diphtheria is limited and does not yet warrant me to launch an opinion so definite as in efflorescence, but I consider it undoubted, that there is an influence into the system, same as in efflorescence, of some subtle deleterious products, which are capable to induce changes in the blood, whose power is displayed in the system by the upset of the nervous system, resulting from the alteration in composition of the blood. The way this is accomplished is probably in the manner described under the pathology of efflorescence, and the seat of choice for displaying the condition is invariably the same. At present, I have no intention to add more to the description of diphtheria than such eminent authorities as Trousseau, Bichat, etc., but some day will publish my views, when more mature from further experience, on a disease which is comparatively rare to individual practitioners, although the death rate from diphtheria here is 0.25 as compared with 0.15 per thousand of the United Kingdom.

To be sure the case quoted was not due to faulty drainage or trapping. The sanitary condition of the house and its surroundings were all thoroughly examined, by the medical officer of health for the borough, the inspector of nuisances and myself at different times.
and independently of each other, and no insanitary condition was to be found, in fact, the drains and other conditions pertaining to them had been laid down on the latest principles, only six weeks before the case occurred.

Case 6. Multiple Follicular and Efflorescent Tonsillitis and its Effects on Scarlet Fever.

To accomplish this purpose it will be necessary to quote cases for substantial evidence.

Mrs. B.'s, two daughters, aged five and seven years respectively, in the early part of October, 1885, were laid up with scarlet fever, variety anginosa, with rash, sore throat and other symptoms associated, prior to and during the progress of the disease. Fourteen days after the commencement, the elder had an attack of efflorescent tonsillitis. The efflorescence was of a yellowish colour, apparently with a white periphery, involving both tonsils, and no tinge of green or other colour. The attack was ushered in by pain, much complained of in the throat, and slightly in the joints. The day before, by elevation of temperature to 104°.2 F, and a pulse uncountable by digital palpation. The skin was hot and burning, water very seantly and loaded with
white, but no true casts or epithelial cells. The feverishness gradually subsided in three days, while the state of the throat was cured in five days by the use of a local application. The younger of the two daughters had on the same day, as the elder was examined, a multiple follicular tonsillitis, in all respects it resembled the same as that described under multiple follicular tonsillitis. She was very feverish, in fact it was like a relapse of scarlet-fever with no apparent cause, until the throat was examined. On the following day each tonsil was covered with a light fawn coloured membrane, from evolvement or junction of the morbid follicular tonsillitis to produce an efflorescence. The feverishness subsided in four days, while the efflorescence by the use of an application subsided in six days. In each case on the following day when the attack of efflorescence came on, the skin was covered with a typical scarlet fever rash, extending from head to foot. Whilst on the second day, in each case it resembled more searalaine maligna, only the skin was not so purple. When the rash appeared the connective tissue on the sides of the neck and of the face were one continuous line, though the connective tissue becoming oedematous, fortunately this
state gradually subsided as the efflorescence disappeared, and did not progress to abscess formation. The effect upon each patient was great as, there was much marked inability for three days to take fluid nourishment. The efflorescence disappeared as stated, and along with it all untoward signs and symptoms. The scarlet-fever rash lasted four days in each case. At the expiration of the month from the beginning of the first attack of the scarlet-fever rash, both in patients desquamated; on the hands and feet the skin exfoliated in large flakes; the desquamation and exfoliation in the elder took five days, and in the younger seven days, which was rather a short period, probably made short by the second pyrexia in its cause. Ten days after the desquamation ceased in the elder, and thirteen after in the younger, the patient again began to desquamate and exfoliate in such a manner that it was more marked than before, also, that it was impossible for any one to state, they had not suffered from scarlet-fever. From the free desquamation and exfoliation, the new skin desquamated again, because it had had not time to harden sufficiently before the upper cutis came off. It took seventeen days for the second desquamation
and exfoliation to be completed before the patient was comparatively free from the infectious.

From the anomalous and unusual nature of the cases, and the relapses which were undoubtedly due to the efflorescence, evolving into activity the elements that were the cause of the scarlet fever and its eruption. Also a second desquamation and exfoliation at a time subsequent to the one from the first appearance of the scarlet fever and a second appearance of the eruption from which it was impossible to differentiate the true scarlet fever desquamation and exfoliation, render the cases of great interest to the profession, and of a value the importance of which at present it is impossible to state. Further remarks here will aid in explanation of the possible connection or possible alteration in the blood constituents, whose effects are very slightly different. In scarlet fever in five different cases where multiple follicular tonsillitis has been superadded during the course of the disease from the tenth to the fourteenth day, and in two to three days after, the scarlet fever eruption has reappeared around the joints in the skin of the elbow, wrist, knee and ankle, but in no instance was it to be—
seen in any other part of the body or around the smaller joints. No secondary desquamation occurred. It is a curious coincidence, that multiple follicular tonsillitis should cause scarlet-fever eruption to reappear around the larger joints and that efflorescent tonsillitis caused scarlet-fever relapse, on the first day like an ordinary case of angina and the subsequent days during the period of eruptions, like that of the maligna, only not quite so purple. It may be explained thuswise, the incubated subtle poison, which found its way into the system, probably through the bronchial mucus membrane, caused certain changes in the chemical molecular constitution of the blood, and probably not quite the same as in efflorescence, but very nearly the same and analogous to that of scarlet-fever. Hence the results were slightly different. The effect of the mobile element acted on the nervous system in a manner similar to that described under pathology of efflorescence, and reflexly influenced the blood supply in the multiple follicular tonsillitis to the vicinity of the joints, thereby to cause an increased blood supply. Herein and nowhere and as a matter of fact increased heat in the cutaneous or subcutaneous tissues in a
and around the larger joints, which a state acting in concert with the poison, reproduced in these localities a typical scarlet fever eruption, the result of the morbid circulating influence in the systemic system. Granted this to be the case, then. The efflorescence being the advanced stage of the multiple follicular tonsillitis, as a matter of intensity and the advanced condition of the efflorescence, demanded not a local but a general eruption to reappear, from the induced fermentative subtle influence, stirring up into activity - a poison, whose circulative power had passed and which was passing into a state of latency or elimination, to thwart the system of a post-inoculation - during prevalence of scarlet fever. It may be these two morbid poisons, possibly alike, though probably inducing a slight difference in signs and symptoms are analogous in chemical transformations, alterations, and processes of synthesis, yet these signs and symptoms are differential, that the follicular and efflorescent formation in the throat is capable in the former to produce a sign of a limited and localized reoccurrence of scarlet fever, and that the latter is capable to produce a total relapse or reoccurrence of the scarlet fever, to show itself again
on the cutaneous area generally. That the result of this latter will cause a second desquamation and exfoliation at a certain period from its initial action, same as scarlet-fever does. A very interesting and most peculiar symptomatic coincidence of rarity and yet of some unknown significance. At the same time I do not hold that multiple follicular and efflorescent tonsillitis are secondary to scarlet-fever, but that these may be capable when once their influence acts on the blood to produce a relapse or recrudescence limited in the former and general in the latter. But do not wish it to be understood the two must of necessity co-exist along with scarlet-fever, as the scarlet-fever very frequently occurs and no multiple follicular or efflorescent tonsillitis, nor in the converse case.

The two cases quoted, kept the same room and lived at a place where it formerly was a marsh.

In other cases of Multiple Follicular and Efflorescent Formations.

The minor cases of multiple follicular formations if left alone with good diet would probably get well of themselves. For
others it consists essentially in supporting the strength, attending to constitutional derangements, haematines and local astringents.

When the stomach is catarrhal and bowels constipated, a good purge is advantageous. To be followed by tonics composed of quinine and iron, or erythrinine solution and iron, combined with glycerine and chlorate of potash, or acetate of potash may be added to the same to facilitate kidney secretion, with the object of diminishing the accumulated effete products and favouring their elimination by the same channel. The object of the acetate of potash is to diminish as far as possible the tendency to the formation of a rheumatic diathesis, and to prevent hyperacidity of the blood. The acetate, when absorbed into the blood becomes decomposed into bicarbonate and carbonate of potash with the setting free of carbonic acid and water. The alkaline salts thus free are there to prevent excessive acidity of the blood induced by the lactic and glycollic acids and probably other acids of the same series, which are produced by the disintegration of the albuminoid molecule. Again the alkaline carbonates and bicarbonates favour kidney secretion, and as a result favour the
elimination of effete products. Another advantage is the alkali is at freedom to combine with the acids, causing them to form a lactate and glycolate etc., and their elimination by the kidney. A still greater advantage is the alkali tends to prevent hyperkinosis of the blood, in such cases if not done, the follicular or efflorescent membrane formation in the thyroid might increase and necessitate a further pouring of the fibrinous or plastic material and the patient in danger of having layers of the membrane superimposed and becoming of a pachydermous nature obstructing the breathing gradually but not surely to cause death. Also it prevents the effusion of this material beneath the membrane and tends to diminish the oedema or inflammatory swelling and still further it tends to prevent clot formation in the heart. It also acts in another manner, that is, it cools or allays the irritable state of the myocardium, whether it be due to the irritating products in the blood, the result of disintegration or the result of transformations of other products of the albuminoid molecule, or whether the irritable state of the heart be due to faulty chemistry in the stomach or intestinal canal, associated with their secretions,
and these products, helping a state of the blood, which causes irritability of the organ. Because the faulty chemistry does exist at the same time as the molecular disintegration occurs and favours it. Therefore it behaves the backs of such faulty chemistry in the alimentary tract, with the addition of re-favouring the elimination of the resulting products by the best channel, which is in the kidney secretion. This achieved the other morbid processes in the blood have a past-exercision placed upon it, also in time to suffer arrest-a destruction of the morbid process. Another factor though not a very important one is the bicarbonate and carbonate of potash are slight depressants to the cardiac muscular fibres, which further helps to ally the irritable state of the heart, working its partly subacute inflamed surface, and to an insignificant extent depressing its activity. Yet another factor of still slight potency is the influence of the alkaline on the capillary arteries, which causes their dilatation, by depressing the tone of the vaso-motor nerve system, that enters them, and thereby influences their dilatation. Therefore it acts as an agent in the withdrawal of more blood to the peripheral areas, relieving the heart of a certain in
amount of pressure, and at the same time demanding less pressure within the areas where the morbid process has exhibited itself, tending to stop the membranous formation. If the cardiac organ is very weak, acetate of potash may be replaced by acetate of soda, whose action is similar in all respects to acetate of potash, except in two and to produce the results of potash salts a larger dose is necessary, as is the case with all soda salts in comparison with potash salts. The two exceptions of the salts are, that, it is a direct stimulant to the cardiac muscular fibre, the muscular fibre of the capillaries, and a stimulant to the vaso-motor nerve areas, which contract the capillary muscular fibres. The former action is a very advantageous one where the heart is weak, but its draw back is its action on the vaso-motor nerve fibres, not permitting the capillaries to dilate thereby throwing more pressure on the heart and demanding more energy and power. This latter state is fully compensated for, as the power of bicarbonate of potash and its carbonate the result of the decomposition of the acetate in the system, are much more powerful on the heart than on the capillary muscular fibres. Perhaps it may
tend to increase the membranous formation in the throat, but it is so imperceptible and uncertain.

Quinine or strychnia, both have the power to act upon the stomach, and aid in restoring the tone of the debilitated state, which tends to counteract the advancing debility and the cataleptical condition, influenced through the morbid process.

The quinine acts directly and indirectly on the stomach, directly by increasing the tone of the stomach, indirectly by influencing the progress of the morbid state of the blood. It acts as an antiemetic and antiperiodic; it also gives tone and energy to the system, leading and facilitating recuperative power to the nervous system, which is evident in all pyrexic conditions and particularly those associated with and acting in concert with septic conditions, induced by malarial, nephritic and miasmatic poisons. Here appears to be the opportunity where quinine produces the most beneficial and satisfactory results. In many cases it positively acts like a magic spell and the patient's themselves feel and manifest the benefit derived by cordiality, by reception and by expression.

Strychnia seems to act in many ways
like quinine, but in others differ. It appears to act as a direct muscular tonic to the stomach, readily creating a desire for solid food by restoring a healthy tone. It supplies a want to the nervous system, by restoring tone, especially to the medulla, when the respiratory and cardiac rhythm are a little indefinite. Thus, it is brought about, by acting as a direct stimulant to the medulla; it causes a better blood supply in the part, in other words it temporarily but not pathologically congests the medulla, permitting of a greater supply of palpable sufficient to compensate for the demand caused. Thereby it allays irritability of cardiac and respiratory centres and accounts for a steadier action and restoration of those organs inconvenienced by the morbid state. It is a factor of great and vital importance to be able at any given time to stimulate the medullary function, when necessary.

The object in the use of the iron is to restore the iron constituent in the blood, which has undergone a change. Hence the iron, hemoglobin is increased and the number of red blood corpuscles in the blood, which are oxygen carriers to the tissues and the removal of effete products from the same to the proper channels of excretion. But
iron is also diuretic and favours elimination of effete material through the kidney in secretion.

Glycerine imparts a sweet taste to the iron preparation, renders it more palatable and less astringent in the mouth. But it also cools or allays in part the inflammation in the throat, and acts on it by keeping it soft through its emollient properties. It does not dry but keeps the part continually moist. Hence, when iron is used alone, it is necessary acts as an astringent to the parts and to the follicular formation and efflorescent membrane. Another property of the glycerine is, that it favours and greatly aids in the absorption of the iron preparation into the blood, to quickly act in the same fluid. But it also tends to constipation by the iron and if the dose be increased it facilitates the non-movement onwards of the intestinal contents.

Chlorate of potash acts as a diuretic, but how it can produce any effect on the system is still shielded in mystery, as it is excreted as chlorate of potash in the urine and not as chloride of potassium. One property placed to its credit is, that it induces a condition in part of the contained hemoglobin in the blood, by producing a compound known
as meta-haemoglobin, which is a stable non-
compound and a non-carrier of oxygen to
the tissues and a non-remover of waste or
products from the tissues. Though its utility
cannot be explained, although in some cases
of inflammatory conditions of the throat, it acts
like a charm and a specific when given
internally. From its local use I have
not seen any benefit accrue.

Salicylate of soda, when decomposed acts
like bicarbonate of soda in the blood. The
salicylic acid acts as an antiseptic and an
antiperiodic, especially where there is a
rheumatic diathesis or a previous efflorescent
condition of the throat. It favours elimination
by the kidneys; its great drawback is
it makes the stomach more catarrhal, though
its influence and interference with the gastric
juice and secretion; it depresses the action of the
muscle fibres of the heart and consequently
weakens the pulse; it produces albuminuria
if continued very long, of a temporary kind
if its use be discontinued, when the albumin
first appears in the urine; and if pushed
it induces frontal headache, tinnitus in the
ears, temporary deafness and a dizziness. Its
great advantage is, that it reduces the
pyrexia very quickly.

Locally — The best method of treatment
is an application to the tonsils on the part, which is the seat of the morbid process, of a solution of nitrate of silver five to ten grains to the ounce of distilled water, by means of a camel-hair pencil, daily. On the use of glycerine and perii, daily. Under such treatment—internally and locally, the follicular condition or the efflorescent membrane will disappear in from one to seven days and leave no paralysis to follow it. Should the throat be acutely inflamed, then a calomel or sinapis applied neat or in mustard, for twenty or twenty-five minutes, then washed off the mustard and replace with a warm calomel or sinapis, which will be more severe for the patient than the mustard, owing to the inflamed condition induced by the mustard. The patient on the following day will express great relief and breathing will be easier, but his throat externally will be very sore. Another adjunct to the treatment is the inhalation of steam, with or without carbolic acid put into the water. It acts as a sedative, more so when the carbolic acid is used, and relieves the patient very much.