Among the many diseases to which the human body is subject, Inflammation doubtless holds the highest place. It affects none of the muscular textures. It is excited by all irritants, mechanical, chemical, and vital, and by many indirect causes acting on the system generally. By some of its forms death is induced in the great majority of human beings. Moreover it is the only disease we can excite at pleasure, and even then it is sometimes useful as a curative means. But beside these remedial aper-
Applications, it is one of nature's great methods of remedi-
ing or counteracting the effects of injury or disease, by it she heals wounds, breaks fractures, and extrudes foreign matter from the organism. Sometimes we even find the "pia naturalis medicatrix" ex-
citing a minor degree of inflammatory action in order that she may ward off a more danger-
ous attack of the same. For the adhesive inflam-
mation, which so often precedes perforations of the Pleurae, Intestines &c., prevents many a fatal attack of Peritonitis.

Presenting these and other points of interest, Inflammation has in all ages excited much of the attention of Medical men.

The inflammatory group, though it presents some leading characters common to all and probably depends on the same essential causes in all cases, has for long been treated of under
certain well-marked subdivisions; these being founded on the varieties of its symptoms and more especially on the characteristic nature of its results in cases presenting the symptoms of any distinct division.

These varieties, as far as our present knowledge attains, seem to depend on some peculiar poisons received into the blood, others on some peculiarities transmitted from the parents or acquired through the habits of the patient or the circumstances in which he is placed.

As examples of the former we may instance erysipelas and the characteristic inflammations of the contagious ophthalmia, of the latter the gouty and serpulous inflammations.

It is our intention to devote the following essay to the consideration of one of
these divisions, viz., that of Diderich. But, as we consider the deposition of tubercular matter to be nothing else than the result of a peculiar modification of the inflammatory process, it will be of advantage to devote some attention to pimple inflammation occurring in a previously healthy individual, since this may be considered the normal type of inflammation.

The word inflammation, like most other medical terms which have been adopted to denote an assemblage of symptoms to generalize a number of somewhat similar diseases, has been much abused and so frequently misapplied and misinterpreted that some have even proposed its disuse. If, however, we limit its use to what it was first intended for and employ it as a strictly clinical term, we will find that among practical men it
convey a better and more comprehensive idea of any disease, designated as such than any other single term which has been proposed to displace it.

As we have already hinted, the term inflammation is a comprehensive word and can have its meaning properly elucidated only by an examination of its characteristic symptoms; these are very properly described by the older authors as Heat, Redness, Pain, Swelling, with a perversion of the vital functions of the part affected. If we substitute for "perversion of function," "Alteration of structure" and add to the definition "a tendency to constitutional sympathy," we believe it will bring the definition of Celsius up to the requirements of the present state of Medical Science.
The phenomena of an inflaming part can be microscopically examined in the transparent parts of some animals; such as the Bat's wing or frog's web. They are as follows.

A contraction of the capillaries of the part irritated, probably dependent on a tonic spasm of the pupils, this quickens the flow of blood in the part for a short time, but it soon expires away & they become distended; This appearance is not constant & thus cannot be ranked among the phenomena of inflammation. Observers tell us that sometimes contractions of the capillaries takes place after irritation, & this to such an extent as almost to obliterate the canal for the time, without any inflammation of the irritated part supervening. This contraction is probably an attempt of nature to limit or altogether prevent the inflammation.
Succeeding to this effusion, sometimes entirely without it, the capillaries resume their normal calibre, then become overstretched, the quantity of blood being increased in & around the part & gradually becoming slower & slower in its passage till complete stasis takes place. During these phenomena condensation of serum turgid wis or coagulable lymph takes place in the tissue, & the phenomenon of this condensation having taken place is generally considered as complete evidence of the previous existence of inflammation.

Many theories have been brought forward with regard to the essential nature of inflammation both before the introduction of the microscope & since its application to physiological & pathological researches.

Some have attempted to account for it on mechanical principles, supposing that the white corpuscles block up the capillaries;
An improvement on this theory is that an increased pithal attraction, between these corpuscles and the walls of the vessels, produces first slowing and ultimately stasis of the blood in the parts. Dr. Bennett and others have completely upset this theory, having pointed out the peg serious objection that inflammation can be excited perfectly easily in obviated frogs in which no white corpuscles can be discovered.

There is every reason to believe that two great forces serve to keep up the motion of the blood in the body; the one a tergo dependant on the contractions of the heart and a post a fronte, the cause of which seems to depend on a pithal attraction between the textures and their panulum the blood; We have good evidence that such must exist, from the growth of the fetus and of the stag's horns, but more especially from the circulation in sponges which entirely
depends on the attraction of the individual animalcules of the sponge for the particular particles contained in
the water. This hypothesis, if the is a
fronte, accords well with a plausible theory, which has
for its support the high authority of Dr. Alison.
that inflammation essentially consists in a local increase
of a physical property of attraction, existing among the
particles of the blood, + between them + the surround-
ing textures, + with which other physical properties
are connected + simultaneously excited "

Is as this theory has always seemed to
account for the phenomena of inflammation better than
any other. That an increased determination of blood
exists is granted by all. The remarkable rapidity
with which incisions, in the near neighbourhood of
inflamed parts, heal; together with the fact that
the hairs on the edges of ulcers + other inflamed
parts are remarkably pigrous in their growth.
the existence of an increased exudation of liquor parvinsis during inflammation, all seem to demonstrate that an increased attraction must exist.

The view has suggested itself to us - viz. that the exudation of liquor parvinsis may take place on account of a lowering of the vital powers of the inflamed part, as an exosmosis, such as we know takes place in dead textures. We know that the separation of albumen from the blood by the kidneys in many cases probably depends on a lowering of the vital powers of theDermatous Organs.

Within the last few days we have heard a theory brought forward by Dr. Gairdner, it is entirely new to us & as far as we can judge seems to apply well to the phenomena observed in inflammation. He founds it on the fact observed by Hales & others that one great cause of the moisture of the eye
But the Phenomena precede the execution.

Why do they do it?
in plants depends on evaporation from their leaves. The theory is, that the first part of the inflammatory process is an edematism. This causes a determination of blood to the part and the other phenomena of inflammation follow hereon. He adduces as a familiar instance the application of a heated iron to the surface of the body so as to give rise to the formation of a blister. In this case we have the edematism taking place immediately, the parts around may continue pale for several minutes, and then determination of blood commences, and to be merged in inflammation. Many other instances of the same sort might be mentioned.

When blood is drawn during the existence of inflammation what has been called the buffy coat is formed on its surface after it has stood for some time. The cause is probably the cohesion of the red corpuscles which allow the fibrin and white corpuscles to remain as a separate layer.
The decolorized clot, so often found in the heart & larger vessels after death, present much the same appearance.

When microscopically examined, they are found to consist of interwoven fibers of very delicate consistence which disappear on the addition of acetic acid leaving a considerable number of nuclei single, double & tripartite in fact resembling those of pus cells. These are the nuclei of the white blood corpuscles which by no method can be distinguished from pus corpuscles. We have kept these decolorized dots in strong acetic acid for months & have found that the nuclei still remained quite distinct, the rest of the clot being reduced to a jelly like mass. These nuclei were generally supposed to be those of pus cells to these shown to microscopic observers.

When fibrin or coagulable lymph has been applied into the textures, especially on a porous surface, it presents much the same appearance to the naked eye as the buffy coat of the blood. Microscopically
it is found to contain a great number of sticky fibres which disappear before acetic acid & leave a number of nuclei. These nuclei become somewhat elongated when the effusion passes into the state of permanent adhesions.

The blood plasma, when it has been effused into the tissues as an inflammatory exudation, undergoes certain changes the nature of which apparently depends much on the conditions in which it is placed as well as on its own quantity & quality. For we must suppose that it varies in quality in the same manner as the blood is known to do.

In the physiological development of the Embryo certain requisites are necessary in order that the Foetus may be normal in type. These are that the male & female elements of generation be both in a normal condition. That the Plasma or nutritive materials by which the Foetus is to be
nourished be normal in quantity & quality & that no
external cause shall interfere with the growth of development.
The foetus may be abnormal from a want of growth or from a want of development.

Though the nature of the development of pathological structures is not yet so clearly made out.
Analogy of reasoning would lead us to believe that pathological & physiological development obey the same rules. That a fur cell is formed under precisely the same laws as man himself. & that it is subject to as many or perhaps more variations in its growth & development. It is true the pro nucleus, cell, or fibre can arise either as a physiological or pathological element without the presence of a parent or parent of the same or approaching to the same nature & form. & that the same causes which affect one may in like manner influence the other.
A theory, very beautiful in itself, has of late years been brought forwards and very supported by several distinguished individuals, it is that phlogenes and granules, such as can be formed by the joining of oil and albumen, are found in part of the animal fluids, which make up a considerable part of the inflammatory exudations, are able to coalesce from a nucleus that they be come fused together around this, and from a cell wall. That by this means pathological exudations are transformed into cells.

There are some serious objections to this theory, for if a vital cell could be formed by the coalescence of phlogenes and granules which any one can produce by rubbing together oil and albumen, it would completely upset our ideas of the creation, for it is granted by all that to make up the mostst organism for higher development than what a nucleate cell can attain is required, in fine if we grant this we must admit
that spontaneous generation is at least one method by which new beings are developed. Moreover if the cells are formed by such a plastic process how does it happen that they resemble each other so remarkably as pus cells do? Another objection is that the nucleus + cell-wall present very different chemical relations + seem as far as can be made out at present to consist of entirely different organic matter. Now as far as we are aware no one has attempted to prove that the molecules which form the nucleus differ from those which constitute the cell wall.

We ought at the same time to remember that there is precedent to adopt such an extravagant theory, for it is quite reasonable to suppose that some of the so-called molecules + granules may be the germ of the pus cells.

In the previously healthy individual if the inflammation be uncomplicated with anything
Specific, if the inflammation itself or its exciting cause be not so intense as to destroy or very much weaken the vitality of the parts in the immediate neighborhood of the condensation, if the condensation be moderate in quantity & if no disturbing cause such as the admission of the external air interfere with the process the general result is that the condensation becomes converted into a part of the body & remains as permanent adhering indications —

But if any of these circumstances occur, as well as in many other instances, a formation of cells is apt to take place. These cells (Per) according to many observers are entirely foreign to the human body in a physiological state according to all they are at least foreign matter when produced in inflammatory deposits. We cannot help thinking that as there are two sorts of cells (white blood corpuscles & young epithelial cells) in
the body naturally; which resemble pus corpuscles

One corpuscles seem to be the usual product

when the inflammation is left most to itself. D. Bennett
mentions having found, in the midst of a clot of recently
offused coagulable lymph, pus corpuscles commencing
to form. In abscess the pus is always first formed
in the centre, that is where the lymph is most removed
from the influence of the surrounding tissues. We
find D. D. ay. (Rosse's pathological anatomy page 111)
estating that apparently some pathological elements, especially
pus corpuscles may in some instances be produced even external
to the body as in the instance given by Helvét, where
he suffered pus corpuscles to form in the fluid of
a blister after it was removed from the body. But
as D. D. justly remarks we must be very cautious
in receiving such experiments.

When air is admitted to a part where lymph
has been offered as a product of inflammation it is much more apt to grow into suppuration. From the admission of the external atmosphere to the surface of a wound in placing the features in a very unfavorable state for their growth or reparation.

In a wound healing by granulation we have externally pus corpuscles which serve to protect the part; as we go deeper we find the plasma becoming converted into permanent tissue.

We believe that pus corpuscles hold a lower place in organization than the permanent features do. That therefore they can be developed under circumstances in which the permanent tissues would have their vitality lowered or destroyed.

The mode of origin of the white blood corpuscles is not yet known, but we think that in the midst of a large contamination ofلقين برانيت

There will be a much more appropriate method
for the development of white blood corpuscles or their germ. Then for the growth of any permanent solid before.

These statements show that we suppose the organization of affected fibrin to depend on the influence of two causes. The first is that of the surrounding tissues which tends to convert the effusing into permanent structures. In many cases the exudation is entirely disposed of thus. There is good reason for believing that an increased vital power of attraction in the parts around the inflammation exists and continues much to the strengthening of this influence.

The second influence is that placed in the plasma itself. The existence of such an influence is sufficient displayed by the phenomena of inflammation.

We suppose it to depend on the germ of the white blood corpuscles which have escaped from the vessels along with the altered tissue ingredients. There are certain "Zyaline Bodies" much like
A delicate cell wall without a nucleus, or in fact closely resembling soap bubbles, found in most pathological deposits where cells are being formed.

Some, in consideration of the existence of these bodies, believe that plastic or formative powers must be situated in the blastema to form cell walls as well as nuclei. Here, they imagine two sorts of germs to exist: those which become developed into nuclei and those which determine the formation of cell walls. They consider these hyaline bodies to represent cell walls which have been formed but not around nuclei. These bodies are said to occur plentifully in all situations where cells are being formed in pathological as well as pathological deposits.

We believe this that pus corpuscles are produced from the germ of the white blood corpuscles which appropriate the effused fibrin.
as purulent is perfectly adequate in all cases to explain their formation. But we suppose it likely that in those cases where the older authors described the pus as excreted it owes its formation to a different origin.

This is produced on the surface of mucous membranes very easily and with great rapidity also without the effaced fibrous becoming coagulated or even visible in a state intermediate between its existence in the referes & its joining the basis of the pus cells—indeed its formation almost exactly resembles a secretion.

In a state of health young epithelial cells cannot be microscopically distinguished from pus corpuscles, nor while a mucous membrane remains in its natural condition these cells become thinned out & dried up into mere flattened scales. But if inflammation supervene we have good reason to believe that these cells, on account of the greater
Abolishment of Cock to the heat of their own

highlighted focal attention for the patient's demands

one quality + precision. + bag diversified skill

in their gender for friend all the character

The like that offers organic products

Pathological in their hypotension so Model + Model

form the fluid circulation which have engrafted

The few encompass in all other

The few encompass in their fiber -

form the fluid circulation which have engrafted

form the fluid circulation which have engrafted
of the exudation, which must be looked on as a foreign sub-
stance, from the body.

The corpuscles present many deviations from the normal standard, these apparently for the most part depend on the qualities of the plasma. The corpuscles present gradations from the tubercle corpuscle on the one
hand almost to the cancer cell on the other. But time
will not permit us to trace these.

There is one form of corpuscle, which is produced in inflammatory deposits, demanding special
notice. That is the "compound inflammatory globule"
or "compound granular cell." We suppose that in
most cases these corpuscles are formed on account of an
early tendency of the exudation to pass into a state of
fatty degeneration. In pneumonia + inflammation of
the substance of the brain, where these bodies are
most frequently formed, we have often seen the exudation
entirely absorbed by passing through this cellular state.
+ These again breaking down and being removed by the
pepels. We ought however to remember that the
most satisfactory mode of cure in all cases is when the
exudation is directly absorbed without having passed into
any evil form.

These "compound granular cells" are pro-
bably formed generally from fibro-capsules becoming
filled with granular matter and increasing in size from
the fibrosis: we have traced all gradations from the
fibro-capsule to the most perfect granular body.

In some cases it is likely that a number
of granules collect together to form a "cell" wall
as shown around them. The late observation of Dr.
Saunderson, that a cell wall is frequently thrown around
a collection of the altered blood capillaries in hemorhagic
effusions into the substance of the brain, lends to
confirm this supposition.
Scurfula.

This term is used in two senses, to express a disease or a diathesis. Whenever what is called tubercular matter is deposited in any part of the body, we are justi-
fied in saying that the disease exists—the individuals in whom this disease occurs, most generally, before any local manifestations of the disease are evident, present some well-marked peculiarities of constitution, these being considered characteristic indications are called the marks of the scurfulous diathesis.

It will be proper to remember that, although most cases of tubercular disease occur in persons presenting the symptoms of the scurfulous diathesis, all such individ-
uals do not necessarily die of tubercular disease—but the other hand that many cases of tubercle occur in individuals who have previously shown none of the marks of the scurfulous diathesis.

The marks of the scurfulous disposition...
seem to depend on some abnormal state of the individual, this not yet being so marked as to constitute a distinct disease. As we believe that the peculiar form of the kibricle corpuscles depends on the condition of the plasma from which they are formed, so we infer that these peculiarities of the perif/usus individual depend on some impoverished state of the blood, this being caused by some derangement of the function of nutrition either in the primary or secondary circulation.

Generally a greater or less number of the following peculiarities present themselves, while the subject still enjoys comparative health.

They have generally a soft, delicate thin

ough, which the large superficial veins often shine as if it were semi-transparent. The skin is also peculiarly apt to suffer from slight irritations such as changes of temperature. The lips frequently become swollen and excoriated
The eyelids are often suffering from ophthalmia ferri. The eyelashes filly long & graceful. Often dark spots under the eyes, an indication of weakness. The whole face has a swollen & puffed up appearance. The sclerotic often has a pearly whitish. The teeth generally being early. In other cases there is a very different state of the skin, the whole appearance being rather papulous. Others these first described are often remarkably beautiful. The circulation is usually languid. The extremities being frequently cold. The pulse is easily excited & they are sometimes subject to irregular febrile attacks from intestinal irritation.

The patient is often remarkably picturesque but sometimes languid + languishing. There seem two distinct divisions in this respect.

Disorders of primary digestion are among the most frequent & important of the peculiarities. The tongue is usually coated + indicative of a disordered
Stomach the appetite capricious & uncertain. The
bowels irregular & the alvine evacuations glairy &
containing an excessive quantity of mucus. The belly is
often tymid.

The muscles are flabby & ill-developed. The joints
large & the whole contour of the body is generally
asymmetrical. The head being large.

The lymphatic glands throughout the body run
to be generally enlarged. When the internal glands are
so it may be considered one of the most certain of all
the signs. The fingers are generally enlarged at the tips
which is another characteristic appearance.

Though these signs mark the existence
of the pernicious diarrhoea pretty plainly. The occurrence
of some diseased conditions, which can scarcely be
to be called tubercular, may be taken as more cer-
-tain proof.

As the most prominent of these we may take
the following: Tuberculosis inflammation of the
external lymphatic glands, when thus affected, they
slowly swell to a large size with little or no heat
or pain. Gradually the surrounding skin omades a dull
cloudy patch, after a time they become soft and fluctuating
but still if put opened the matter may be absorbed or
dry up into a scab-like or crustaceous mass, in a care
result. If they are opened, by the surgeon's knife,
or if they open spontaneously as they often do, they
are found to contain flakes of curdy matter floating
in a serum fluid. After the opening intractable
fistulae or ulcerations are apt to remain. The cause
of their fast healing is the large quantity of tubercu-
lar matter that is deposited in the surrounding
areolar tissue. There is often chronic inflammation
of the brain and of the lining membrane of the nostrils, keeping up a continual
putting off of the parts. Often humorous clefts
Pica & Ophthalmia Barbi. Brown pulpy degeneration of the synovial membrane of the joints. Lupus, Witches C. are also frequent indications of a syphilitic disposition. When the body has sustained an injury the attempts of nature to remedy or restore it are often tardy & imperfect. The syphilitics are also peculiarly apt to suffer from the effects of diphtheria, & also from the evil consequences of of measles, Scarlatina & Smallpox.

It is almost impossible to convey an idea of the appearance an individual affected with the syphilitic diathesis presents. Yet an experienced eye has not the slightest difficulty in observing it & it is very important to be acquainted with it for we have good reason to believe that many lives may be saved by carefully guarding against the pre-disposing & exciting causes of Tubercular Disease.
The causes of this disease as in all other cases may be arranged under two heads. The predisposing and exciting. The predisposing give origin to the disease. The exciting produce or give a stimulus to the localization of the tubercular matter.

The predisposing causes are certainly the most important, because the exciting are in many cases very slight. The most important are as follows.

Hereditary taint must be mentioned among the first. We are aware that it has been denied that transmission from the parents is a cause of syphilis, but there are so many incontestable proofs that the predisposing cause of tubercular disease passes from the parents to the offspring that we cannot doubt its existence. Still its importance has undoubtedly been overrated by some.

It is probable that weakness in either parent or both as well as syphilitic taint may in some cases predispose to syphilis.
With regard to the other predisposing causes, to which the majority of cases owe their origin, we may state comprehensively that whatever in any way tends to weaken the vital power may predispose to scrofula.

Perhaps the most important of all these depressing influences, is the want of a due supply of a proper pabulum to the blood, however that may be produced, whether it depend on some fault in the chylopoietic viscera preventing the proper assimilation of the food, however nutritive it may be, or on some deficiency of the food itself in quantity, quality, or mode of administration. There seems something remarkable in the influence the deprivation of the fatty elements of the food has in the production of this disease. We have this well exemplified by the great benefit often derived from the use of cod liver oil in the treatment of these diseases.

The use of all animal oils, especially fish oils, as habitual articles of food, is productive of very great
protection from the invasion of this disease.

In many islands where the use of animal oil as food is stated to be rare, it is also rare in warm climates where fat is taken into the system is not as much required for the purposes of respiration and animal heat. We have read that sycophantous diseases are much more frequent in grazing animals than in carnivorous from these latter from the nature of their food consume much more fat than the former. Men and animals brought from warm climates are prone to sycophantous diseases poor the cold will cause them to burn off much more fat than their system was originally intended to appropriate.

A great many of the other powerful predisposing causes of sycophant affect the function of assimilation directly and indirectly. Thus want of salubrious air and healthful exercise which are frequent predispositions to sycophant both have a very
deleterious influence on the process of digestion. It is probable that their own depleting effects however are more injurious. Cold and wet also very powerful agents in the production of this diathesis have some connection with the digestion. For if the quality of carboniferous materials in the food be depleting their influences will be much more bane.

Many other depleting agents have a powerful influence in the production of perofula. Thus exhausting evacuations of all kinds, measles, pertinax and others, are often the forerunners of tubercular disease.

Depleasing mental influences are sometimes the most prominent predisposing cause. A good many other agencies acting on the human body are opposed to pre-disposition to perofula.

Though any of the above mentioned causes may probably of itself, if severe enough or long enough applied be sufficient to produce the perofulous dia-
Thus, yet as several of these generally happen to occur together, it is very difficult to say which of them has the greatest influence.

To take a familiar instance, syphilis is much more common in the dense crowded parts of large cities than in agricultural districts. We shall inquire into the circumstances of the individuals in these two cases in order that we may illustrate how the predisposing causes are connected with each other. In the crowded parts of towns the poor inhabitants live in small dark rooms, crowded & ill ventilated, damp & dirty. Their clothing & means of obtaining artificial heat are generally inferior to those enjoyed by their equals in the country. In the town they are more exposed to disease, debauchery & the train of evil consequences. In the country the poor have generally more constant work than in the city; those in towns have irregular employments & many other evils to depriev their spirits; moreover in towns the food of the poor differs very materially from that of
agricultural laborers. In the country besides plenty fresh air + exercise which enables them to digest their food well. The inhabitants get abundance of good milk + butter. The animal food they use is good + generally rich in fat as it often consists of fine flesh & they get their meals regularly + well cooked.

In towns their food is often irregularly supplied, as they live almost exclusively at one time + are half starved at another. It is seldom well cooked. They use meat tea instead of the nutritive milk of the country. Get little or no butter + their butcher's meat is often, lean & of bad quality.

We might mention as an example of the good effects of nutritious food that infants fed at the breast are seldom porphulose.

The exciting cause to the deposition of tubercle are those of inflammation generally. But it would seem that in many instances very little irritation is required to produce a deposit & that in many instances when the predisposition in the blood is
But may not some effect be due to the tissue influenced by nerves surrounding the
temporal bone, most of its funicular tubules, and serious membrane, equally influenced, often
water cysts.
very great tubercular deposition may take place without any constitutional sympathy.

With regard to the essential nature of tuberculosis, we consider it simply the result of a modified inflammation, occurring in a system nourished by blood which has considerably sunk under the normal standard. The blood in these cases is known to contain a diminished proportion of red corpuscles, as since advances it is likely that some other important defects will be established. In the meantime we may suppose that this blood gives rise to the peculiarities of the pernicious constitutions when effusions of lymph sanguineous occur. The condition will differ much from the normal standard.

An interesting observation is that tuberculosis depends on a low form of the inflammatory process in that in chronic cases occurring in cachectic subjects arising as insidiously without much constitutional disturbance the part of the lung affected is frequently the upper lobe. Again in cases of rapid phthisis the lower lobes are frequently
as much affected as the upper.

There is good reason to believe that a great proportion of tubercular deposits are in the form of "gray tubercle" when first exposed. This much resembles coagulated lymph, showing a great resemblance to inflammation. New time and present circumstances will not allow us to enter into the interesting features of offering and the other methods of attempted cure, but we will confine ourselves to a few observations on the microscopic characters of tubercle, reserving the rest to be put in as an appendix if time allows.

Tubercle is found under the microscope to consist of much granular matter of varying chemical existence. It what have been considered the characteristic elements of tubercle. "Tubercle corpuscles" we may here shortly state that we suppose them to be nuclei. They present all the characters of nuclei and are probably produced from the germ of the white blood corpuscles which being effused into a blasticum pool capable of becoming highly organized are
Arrested in their development. Perhaps the enjournals themselves are in an altered state.

John F. Richardson