Thesis
On the Pathology and Treatment of Rheumatic Fever.

by
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On

The Pathology and Treatment of Rheumatic Fever.

Rheumatic Fever is a disease of common occurrence, which may clear off in a few days and leave no trace behind, but which may also prove the seed of death, which will entail a manhood of disease and hasten its victim to an early grave. It is a disease which we shall frequently see in Greece, the results of which will be coming continually before us. It therefore deserve our careful and attentive consideration.

In considering the Pathology & Treatment of Rheumatic Fever, I shall confine my attention to
Two kinds of rheumatic force are mentioned by Austin —
the former and the "Caput lae" or "Rheadal" (Dr. Sow)
(Day torch). The letter appears to be more nearly allied to
your than to rheumatism in the following reasons. The
forces are liable to be attacked on the joint hands, but it may
attack large joints also. 2. The articular affection is rolling
than in the other form and does not attack large joints at a time
3. It sometimes occasions destruction of the small joints of the
foot and hand. 4. The surface of the articular cartilage is
sometimes sprinkled over with a white powder which was
Waller & Gregory's Water of Physic O.T. 1817.
Gordon & St. Chaloner to be Carbmate of time 1817.
Believe to be Saffron of soda both of which deposits take
place in gout but never in true rheumatic form. 5. The
disease is apt to pierce as gout does the letter attacks
being more venom than the former earlier. 6. It is very
amenable to Calomelum which exert its influence just
as upon gout as it has little disposition to implicate the
heart but the symptoms persist frequently happen (Mr. Sow)
All these character point to its gouty origin. I do not
know that the test recommended by Dr. Sow has been
In its nature, its complications, with acute rheumatism, we shall make a few observations as to its treatment.

We shall confine our attention to what Dr. Watson calls fibrous acute rheumatism, in which there is high fever, an acid taste in the mouth, the tongue thickly glistened, the urine of a dark color depositing a thick dark sediment, the phlebitism excessively acid, the fingers round and full bounding, we exclude the synovial from which is some joint called rheumatic joint; it is perhaps more nearly allied to gout than rheumatism.

It has been said that rheumatic fever is much symptomatic of a local inflammation affecting one or more joints; that all its phenomena are to be explained on this supposition. But why is it that frequently the fever precedes, it is out of all proportion to the local disease? Has sometimes, the affection of the joints is entirely over before, the disease is recognized to be rheumatic from any other than the heart itself; it becomes affected? Sometimes the fever rises to a high, before any local symptoms have been
applied in such cases mainly if there be any acid in the blood or pus or of a phthisic of a patient labouring under the form of disease.
established, as to cause even cautious & intelligent practitioners to mistake the nature of the impending attack. Moreover, when febrile symptoms do this precede the establishment of local inflammation, they are not only not increased by its occurrence, but as was remarked, the physician & observer byデンハム, they were generally relieved, the pulse becoming calmer, the countenance more anxious, & the patient altogether paler. Dr. Bruns has moreover shown us, that there are cases of rheumatic gout in which no affection of the joints existed. How different are the phenomena attending acute rheumatic gout, existing in a joint, from those of rheumatic gout? Its constitutional disturbance occurs on the former while the inflammation becomes destructive, then inflammation comes on & threatens to wear out the patient; it may be that the joint requires amputation, should this be done in time immediate relief will be given, the power of irritation being removed, the patient will soon get well. On the contrary in rheumatic gout the constitutional dis-
The substance appears from the very first, the train of symptoms is altogether different. Rheumatic fever is frequently complicated with inflammation of one or of both membranes of the heart. Now how is this to be explained unless we consider that there exists some irritant matter in the system which causes inflammation in these tissues? The older anatomists and physicians in order to explain this frequent complication, attempted to trace the continuity of the fibrous tissue of the internal pericardium with that near the heart, believing that continuity of tissue was necessary to the spread of inflammation, thus the pericardium has been traced to maintain its connexion with internal parts through the diaphragm, which is continuous with the pericardium at its edges, in this manner the spread is from one of which the rheumatic inflammation of the joints reaches the heart. But the inflammation which occurs in the coronary vessels of the heart appears to be quite different from that which we find in the joints; in the former pericardial seldom occurs, in the latter
it is the exudation that manifests the lesion. Moreover, periarticular may begin with the first symptoms of articular inflammation, as we have seen preceding them, the suppuration of arthritis may occur when the joint affection is at a distant part if then as intermediate structures are affected, so that the affection of the heart can not be explained as the result of mere extension of the articular inflammation. The inflammation of the joints in this disease is altogether peculiar, they are swollen red and extremely painful, yet, even in the most severe cases, there is no predominance of lymph, and the usual results of inflammation, accordingly, rarely occur. These considerations lead to the conclusion that Rheumatic Fever is a specific and not symptomatic.

Rheumatic Fever is caused by some poison in the blood. In proof of this we have the following facts. The Constitutional Disturbance usually precedes the local disease, the disease attacking the fibrous tissue principally, then in different joints.
in succession, in cases when the local symptoms outside the constitution are becoming more developed. In true blood disease, we have a state of depression major, sometimes pain in the limbs and joints, the skin being dry, or exhibiting a profuse perspiration or cutaneous eruption, the secretion of the bowels and kidneys are apt to become more or less discharged, other internal organs may have their function disturbed, some by one kind of blood poison or other by another, when the poisonous matter has been eliminated from the system their symptoms disappear, and the patient recovers. And all these phenomena we see in rheumatic fever; instead of the poison being itself seen particularly on the throat or in the cervical lymph nodes, as in epidemic typhus, or in the pulmonary lining membrane of the lungs as in measles, he finds it affects the fibrous and fibro-elastic tissues more especially. As there are cases of tubercle like cataract so there are cases of rheumatic fever...
without affection of the joints. The typhus is
often attack the weak & exhausted or it may
appear in the strong & vigorous; many other
points of resemblance might be mentioned
which are common to these diseases besides
those to which we have referred & pneuma-
tic fever. S. Williams says “Acute Glanders
is ushered in by an attack of primary fever
with or without rigor. This is followed by pains
in the limbs for fever as often to be misc-
taken for an attack of acute pneumatics.”
Acute cheeze, certain of the blood,
being a close resemblance to pneumatic
fever, which may be, I mean least was
mistaken & S. Williams for the disease
under consideration. Then is another
blood disease occurring in puerperal women
which has been mistaken for pneumatic
fever, that is, the affection of the blood
by those from phthisis or other cause, in
describing the symptoms of this disease
S. Beatty says “The symptoms that ac-
company the early stage, usually commen-
ta within a few days after delivery, it cruel
Another proof that it is a blood disease may be drawn from the frequency of Pericarditis as a complication. The Pericarditis seems to depend on a morbid condition of the blood. Because of the general tendency to Pericarditis in this and other diseases, in which the blood is affected (as in the fever) we can seldom trace any exciting cause of the Pericarditis. How the Pericarditis may come on before the cutaneous affection and may in fact be the only local effect of the Rheumatic Process. (Taylor)

of fever pain manifest. I sometimes noticed
of one or more of the large joints, togethe
with intense fever, loss of appetite +
great thirst, & occasionally, but not always,
pain & tenderness in the lower part of
the abdomen. The absence of the last sym-
pton leaves the case with a strong sus-
ception to acute rheumatism in which
I have known it to be mistaken; it
has led me to suppose that some cases,
described as the latter, terminating,
fatally in general maladies were inst-
cences of this disease; it is thus accounts
for the horror of rheumatism in lying in
patients which I have heard sometimes
expressed” These facts considered have
the air born to doubt that rheumatic pain is
dependent on a materiae animi in the blood.
The origin of rheumatic pain seems to be
of constitutional origin. It is hereditary &
therefore constitutional. Sir William Per
"all original connate bodily peculiarities
tend to become hereditary, while changes
in the organic structure of the individual
From external causes during life and with age, and have an influence on his figure. It is not every one who can have a rheumatic form. Of those brought up in nearly the same circumstances and exposed to the same causes of disease, one remains exempt while another becomes affected with the malady. The principal predisposing cause to the formation of the gum of rheumatic form is, its being hereditary. It may, however, be found in those in which the heredity may have been traced in such cases, for many consider that the predisposition was in some way or another generated by emigrations or diseases, affecting the general health; here may be functional or organic; it may under certain circumstances produce the tendency in Rheumatic fever. The disposition existing, general and morbid, many causes the development of the Rheumatic pains in the system. A frequent presenting cause of it is the change in temperature, but this is not the only cause as some have maintained. In Rheumatic fever occurs
It has been objected that these numbers do not prove that Rheumatism is hereditary, yet when they are taken together one finds that the number of cases in which distinct rheumatic predisposition from heredity, that was otherwise was nearly as great as in cases of Rheumatism pulmonalis. In Rheumatism we have hereditary predisposition 337 in 1072, whilst of 1000 cases of Rheumatism 367 were found to have parents who had the disease. Are certainly Rheumatism is generally considered hereditary. Why not also Rheumatism?
when there has been no prejudice. Cold & damp
continued are very apt to bring on rheumatic
fever or rheu. dis-posed, on that anything
that tends to lessen vital force - as over feed-
ing, bad air, smoking, mental depression may act
as exciting causes of this disease.

Is Rheumatism hereditary? is a question
of considerable importance. Of 276 patients
there were 17 at George's Hospital 71 were as-
certained to have an hereditary tendency to
rheumatism in 137 or had it any tendency
could be traced; of the remainder of the rest was un-
certain. Of 50 cases mentioned by Ballard 17
had a hereditary taint, whilst in 12 dis-
tanced hereditary predisposition was made out.
Chenet states, that half of the patients he treated
had had parents who were subjects to rheumatism.

It has been said, that in those cases, in which
the parents of an individual taking under
rheumatism, are accustomed to have had that
disease, may put the affection in both cases
be due to a previous or predisposing and
exciting causes, I have nothing whatever to do
with hereditary tendency. This Affection think
On Thurnation & B.
is by beast pet aside by the observations
made by Pendamore on this subject. It
pays it is clear however that this point can
be determined only "by observation of facts
of general reasoning," and from positive
demonstration. The for instance, in which
the disposition is truly prevalent in the
same family. At the similar circumstances
in regard to climatic local situation, to
or the general habits of living, may serve
as an explanation. By members of the same
family should be particularly liable to rheu-
matism; yet we must with a marked illustration
of the fact, in seeing that one or more indivi-
duals of a family are subject to rheumatism,
who have changed their place of residence in
early life, I have been led into such new cir-
cumstances, that are many personally in the
resignation of a disposition derived from hereditary
structure."

We have seen that rheumatic fever is a disease
of the blood that it is hereditary, and for con-
stitutional, let us now turn our attention to
that is believed by authors to be the matter, parti-
Mark on the Stomach &c p. 82.
in the blood which causes this malady.

Lactic acid is generally believed to be the poison in the circulating fluid, which gives rise to the phenomena of Rheumatic Fever.

This poison has not been demonstrated but is inferred from the condition of the secretions in this disease, as we have large quantities of lactic acid thrown off by the skin, from times by the kidneys, the saliva also is commonly acid. Sir Prout thinks that the primary, especially the secondary, assimilating processes are at fault. "The alimentary matters which ought to be converted into albumen by the primary assimilating organs: the albuminous matters of the blood which in the secondary assimilating processes, ought to be converted into living gelatious albuminous tissues, are, in the deficient or the disordered operation of the vital processes, converted in a greater or less degree, into lactic acid and other unnatural combinations." The gelatious portion of the muscular system & its appendages which are produced & maintained by the secondary assimilating processes,
Practical remarks on Etni Rheumatism
Fev. 8. 144
Dr. Pratt considers to be especially affected.

He ascribes the severe pain in phrenication
to changes which take place in the nerves
similar to those indicated above. Dr. Williams
also is of opinion that lactic acid is the
principal cause of phrenicai fever. A person
after much previous exposure to cold is especi-
ally apt to take this disease, on account
of lactic acid & the lactates of carbonic an-
moniac being checked & retained in the sys-
tem, the kidneys are then called upon to
eliminate the foreign matter, but failing
lactic acid accumulates in the blood,
firstly acts as a ferment causing the
formation of new & varied products as
litiric acid &c. in this manner Dr. Williams
think phrenicai fever is set up. Dr. Todd
concurs with Dr. Pratt that lactic acid
is the phrenicai Poison, which being imperfectly
excreted, through an abnormal channel developed
in the alimentary canal it also produces in
the secondary obstructive assimilating process,
infest the blood from every source & tends to per-
petuate the disease. An objection has been made.
*Dr. Taylor conceives that the immediate cause of pericarditis, and the inflammations in a morbid condition of the blood. In bright disease and in phthisic we can find such a state, in these diseases pericarditis most frequently occurs. The condition of the blood mentioned by Dr. Taylor is not specified exactly. In the case of bright disease there seems to be no excess of phthisic. Given the matter male is not yet fully determined. In another disease in which the blood is disease there is a
to the theory that lactic is the matter moti of phrenatic fever, namely the absence of relief from the copious acid secretion of the skin, this indicating that the real maladies motive was not being eliminated. These proper inscriptions do certainly give relief in many cases; then they do not it is perhaps owing to the great accumulation of lactic acid in the system which is as been seriously diminished by the evaporation through the skin. We may then conclude that lactic acid is in all probability the product of malabsorption which gives rise to phrenatic fever. The most frequent complications which ought to occur in the disease under our consideration are peri- and eulocardio, let us try to ascertain how often these maladies occur and whether the former or the latter is of more frequent occurrence. Felli concludes in regard to this question, that we find some least affection in about three-yetths of all cases of phrenatic fever. That recent disease occurs in almost the half.
Under the great(...quadruped.

Fell on rheumatism p. 263.

* Braham and T. Lyle in Satham.
half, it that an old standing affection occurs in about one in every nine. Similar results have been arrived at by Budd & Bringland. With regard to periarticular almost all observers agree that it occurs in between one fifth & one sixth of all the cases of rheumatic fever. Endocarditis was found in one in nearly two and a half. Dr. Feller concludes, that some what less than one third of all recent cardiac cases come, & with among patients suffering from rheumatic fever, will be found to result from periarticular. It somewhat more than one third from endocarditis, whilst the remainder will be referable to functional causes, such as imperfect closure of the mitral orifice consequent on irregular contraction of the structures near the valve & also to fibrin deposited or thrombus endocardial infiltration. Dr. Taylor & Dr. Latham have both considered this matter, & their results are very similar. Dr. Taylor concludes that valve disease occurs in rather less than one half, while Dr. Latham thinks that it occurs
occurs in rather more than one half, and they both agree that 2 in every fifteen cases of rheumatic fever are attached with endocarditis. The observations of these gentlemen men may be said to agree, yet each of them interprets them differently. Mr. Latham considers all the palpable murmurs as indicative of existing endocarditis, but he has given as no proof that in all cases these sounds were present. He indeed states that the endocardial murmur persisted whilst the patient was under observation in 36, that it ceased ultimately in 17 cases, now, the number of cases proved to be recent is uncertain, but it is between 33 and 36. Mr. Tayler on the contrary concludes that in three cases in which the palpable murmurs persisted it was principally owing to disease of old standing. In relation to this question it is important to remember that there are many palpable murmurs which do not originate from endocarditis. There are murmurs produced from regular action of the heart that are especially those which arise...
from an anaemic state of the blood which give rise to murmurs having a great similarity to the musical or aortic gush. Moreover a very small amount of inflammation existing on the valves of the heart will give rise to a murmur, whilst as much inflammation of the pericardium could not be detected. Martyr vegetation on the valves also give rise to murmurs; let us consider the probable origin of these peculiar bodies so often found on the valves of the hearts of those who have died from rheumatic fever. These vegetations have until recently been considered the product of inflammation of the valves, it is now generally believed that they are the result of a mechanical deposition of the fibrin of the blood. Wilson strongly advocates this view, he thinks that it is improbable that the lining membrane of the heart can become inflamed at all time it contains no blood vessels. F. Omerod in remarking on this objection to his Saltstone law states: Remarks remarks. Inflammation may be carried on by the same organic means as Nutrition.
nutrition, and if in any part, nutrition by unusual means affects an ordinary end, purely inflammatory in the same part may do so likewise. In disease too we find the valve, becoming vascular pulvelling & sometimes ulcerating, so that it cannot dissect altogether the possibility of the endocardium becoming inflamed. Dr. Jumon also urges the fact that these depositions occur more frequently on the valves of the left side of the heart & on that side of them which is in contact with the moving blood; how he argues they should not the inflammation occur on the tricuspid as well as the mitral valve, or the pulmonary as well as the aortic? Why should the predation appear on both sides of the affected valves? The stream of blood ought rather to wash away the predation from that side on which one most frequently finds them? I leave it on that surface on which it is predominant occurs. How all these facts yield a ready explanation by referring the occurrence of these wanting gluths to a deposition of fibrin directly from the blood. They occur on the valves which
come in contact with some highly deteriorized blood, from a perfuse directly opposed to the venous stream. Mr. Simon showed the greater elipticity of arterial than of venous blood when in motion to deposit fibrin on the valves, by passing a thread through a large contigious vein & artery, permeating it to remain there some time, on the removal of the thread it was found that whilst on the part which cut the stream in the vein, there was no deposit, yet on that which was passed through the artery, waste, separation of fibrin was found, similar to those seen on the valve of the heart. This experiment was repeated and always with the same results.

We must not lose sight of the fact, already mentioned, that inflammation sometimes does affect the valves of the heart, also that in connection with these wart formations, it sometimes have an inflamed state of the valve, this inflamed state may produce a little roughening which may act as a nucleus around which the fibrin of the blood becomes deposited. There are many cases.
Talk on Rheumatism
Cases in which the slightest amount of inflammation cannot be traced, yet these bodies are found in the valves. It may be here remarked that the blood in this group has a peculiar constitution, there is an increased amount of fibrin, and that fibrin is not well held in solution, on account of the increased amount of acid so that in the blood of rheumatic fever there is a peculiar tendency to the deposit of fibrin. From all these considerations we may conclude that fibrinous deposits may occur without any inflammation of the valves, and that sometimes such inflammation existing forms a nucleus around which is precipitated the fibrin of the blood. Now their frequent vegetations constitute the most frequent form of rheumatic valvular lesion, so that we have here a great source of undescended murmurs which do not originate from cardiac inflammation. Records of post mortem examinations bear us out in our view that prudently it is a wise question in the complication of rheumatic fever than in endocarditis. Of 28 fatal cases in which these diseases occurred 19 were found in post mortem.
In desertion of the peripheral parts, a

Endocarditis

Endocarditis is most difficult to diagnose, its symptoms are not always ascertainable or definite, and it is doubtful if one shall ever be able to know it as we do syphilis. The difficulties of its diagnosis are 1st. The rarity of the disease in an uncomplicated form. 2nd. The frequent coexistence of pericarditis. 3rd. The general resemblance of its constitutional symptoms with those of the latter disease. There is no difference between the murmurs of recent and old endocarditis and old valvular disease, so that it is impossible to say that it is recent or that it is old. Burdett, Libson, Graves, Mackham, Chambers.
Most putative examinations to have pericarditis of to have endocarditis. Dr. Barklay found that in 8 fatal cases of rheumatic fever, the former occurred in 6 the latter in 3. Dr. Taylor reports that, of 17 cases he examined of pericarditis, endocarditis only occurred in 3. From these facts we may at once conclude that pericarditis is more frequent in rheumatic fever than endocarditis. This conclusion has been arrived at by Dr. Strouts, who has, especially his conclusions from the results of postmortem examinations; there is an objection known to this mode of deciding the question, namely, that inflammation of the internal pericardial membrane of the heart may be fatal while that of the external membrane is not.

We shall now proceed to make a few observations as to the treatment of the disease under our consideration.

When one hears of the treatment of rheumatic fever, nothing can be more surprising. One advocate, blood letting, whilst another wholly condemns it, one trusts to Peruvian bark, another to mercury; Colchicum, conversa
quaiacum, opium, alkalies, acids, purgatives, diaphoretics, tincture, emetic, digitis, puratia, all have their advocates; but this is not all, every one has his peculiar combination, his certain dose, which seems to have been most successful in his own hands, but which, when employed by another for, all its efficacy, is forthwith depreciated as being wholly useless when compared with a peculiar combination which this friend has discovered, which he has never found wanting. "Now you may be sure" says the Father, "in one's opinion concerning the treatment of such a disease which is of common occurrence, & every practitioner, are thus unsettled & diverge—you may be sure first, that no specific for that disease has been discovered; it is, that the disease is not very obdurate, or our pleading students, to any medicinal plan. It as briefly consider some of the more important remedies which have been employed, & recommended for the cure of rheumatic gout.

If there is a disease, which indicates the use
Mr. Bullard, the great advocate for large flotations, admits that the heart commissuration was the rule and the exception.
of a full free copious bloodletting - in which there is a full bounding pulse, blood whichPersian, buffed and cupped until the last drop, i.e. there is intestine local inflammation - that disease is pneumatic from, according for perspiration we have mighty advocates the prattam that, by taking four or five floats of blood in as many days, they will cut short the disease, lessen the chance of the heart pressing effects. Thus on the contrary and thus such treatment will cause the complication of internal vital organs, which may produce sudden death. Before having recourse to such practice we should consider all the

ulterior effect of such treatment - a productive convalescence, fitted to frequent relapses, especially in such a sickly condition, prone to disease, from which the patient may never recover. In practice the case, in which perspiration, i.e. that only to a small extent, receives any force, at the very start of a first attack, only when the patient is restless & vigorous, should this remedy be employed, and so much for its

St. Hope, In Todd,
own remedial effect, but principally, as preparatory to the action of other means of cure. St. Christopher has few cases in which after bleeding it, the elevation of fever stops, or apparently even curts. Thus, treatment, however, can seldom be employed since the disease is usually too far advanced before the patient applies for medical aid. The same rules should guide our use of bleeding. Should inflammation of the heart occur, but local blistersing, by cupping, or sucking over the auricle, be used, especially to remove that death depression which frequently accompanies this complication. Purging is a most favorable means of cure, Calomel and Opium, followed with burning by a black close, which will clear at least four or five evenings during the day, thus is to be done for three, but we are recommended to continue the treatment for parallel days. And the necessary amount which is intoduced in the patient by this remedy, I think
F. Cazenave of Man
F. Todd Collsman of Dublin
F. Lend amour
Apparent to counterbalance the good results that may accrue, the packing pain, which is produced by the slightest motion, which he will try to avoid by lying for hours exactly in the same position, should not be forgotten. But there are other objections - it tends greatly to reduce the strength & necessarily subjects the patient to a certain amount of exposure to cold which should always be avoided. Carried to the extent recommended by Mr. Hume is altogether out of the question, but it may be most beneficially used when the patient is first put in order that by one free evacuation, the fluids may continue to obstruct matter. In those cases too in which there has been constipation for a day or two previous to the attack, a moderate employment of purgation is especially indicated.

The use of opium is generally recommended in this disease, it always relieves what is of greater importance. It may be obtained by its use. Opium has been objected to because of its supposed action in suppressing the peristalsis, this effect however is very seldom not
st. holland street inst. on the use of spirits
ice, they need in phrenatic fever. I take it at a glance to think that it is rather stimulat-
ive than depressant, and I am inclined to think that it is rather stimulative than de-
spressive. The drug in this disease, is not to be given timely, it is measured out by the ful-
fillment of the purpose for which it was given.

Mercury has been used very generally in the potassic mercurial combination which is
of such use in commencing the treatment of this disease. I would strongly advocate its use, it reduces the inflam-
matory diathesis, it increases the action of the chyle, it cleans out the liver, notwithstanding these wonderful
effects however, a simple purgative was found by the doctor to answer quite as well, the disease was found to subside
much sooner than mercury was left out of the formula. But it is not the use of
mercury as a purgative, but as have the
benefit of their actions if it really prevents them, to which we object, it is its use
in the disease for the purpose of nothing
like than the "immediate & complete re-

St. Helena. The Character of Aunt Chuntan
June 1847
tion of fever, pain & inflammation, with
the one great prevention of all dangerous com-
lications by organic lesion of the heart &
other vital viciss. A few were the effects
of the drug in rheumatic fever how invaluable
would increasing be in rheumatic fever, but
unfortunately such treatment seldom succeed.
When it does fail the patient is left paralyzed
& weak, ill able to stand up the disease;
the tendency to heart complications too is rather
increased than diminished. So matters thinking
that mercury has the power of preventing the
disease fixing itself on the heart, &
Miles also pronounces him as one of the great
advantages attained by this plan of treatment
he fairly carried out. So failure as the other hand
states, that mercurial action should never be
induced as a cure for an uncomplicated attack
of acute phrenatism, he says that it is pre-
ventive production of evil energies that may be
high depressive, may be felt for months or even
years; further he objects, that should disease
of the heart result from the use of mercury in this,
name, the limiting of the effusion of lymph on
the inflamed surfaces. Is mercury to be employed when inflammation of the heart sets in? On this point we have many con-

tradictory opinions, some say that it is of

inestimable value in preventing the forma-
tion of the inflammation, & causing the abso-
tion of lymph; others maintain that it can

do as good or all; whilst others think that

in many cases it does produce good results

other in other cases, it may do harm.

Dr. Watene says that the only drug he would

trust to, to limit the inflammation of the

heart is mercury. Dr. Wilson of St. George's

hospital is quite of a different opinion, he

also would in any one case approve, that if the em-

barrassment of Calomel & opium, he had in any

one instance prevented adhesion of the pericardia-

ce or arrested or corrected the resolution of fibrin

deposit on the cardiac auricular valves. When

we consider that such cases, as Watene, Lally

McLeod, Portland, &c. &c. many more who have

had experience in this disease, tell us distinctly

that they have good benefit results from the

use of Calomel & opium, I think we shou
not altogether find mercury as a thing utterly
useless & injurious. I would not, however,
advocate the indiscriminate use of this remedy
in such cachetic cases, as it is to be avoided
but in the most in conjunction with fomenting &
plastering the cardiac region, the disease may
be limited & its ultimate results delayed.
Let it be understood, that we do not claim for
mercury, the power of preventing adhesions
at all, for it is, that when the gums become affected,
there is a manifest particular of disease in
many instances, this is by pain, loss of speech
& dyspnea, if lymph has been thrown out
adhesion sick at all it inhibits the place.
Mercury can have no effect then,
Tartar emetic, used in Centrifugal doses, has been recommended by M. Llanee
in the treatment of rheumatic pains. It
appears to have been especially beneficial
in the young & phthisic, on account of its,
Causing plethoric depression it was not employed
than the patient was weak. Subsequent
observations have most tended to confirm
M. Llanee's assertions so that this
Brigget, Maggie too,

S. Guy.

M. Brenda. M. John
S. Buchanan, Brockleby
Remedy is not now much employed.

Chinchora bark was used in the treatment of this disease, in large doses of 31 to 32s & some wonderful cures of the articular inflammation effected; but in many cases, disease in the meninges supervened & fatal results frequently followed. At first, treatment by bleeding & quinine, this form of late brought forward, its employment has been attended with considerable success.

Quinine will be found of great use during the convalescence from rheumatic fever.

Colchicum has been much recommended in this disease, but it appears to be most useful in those cases which approach gout in character. Colchicum is most useful in chronic rheumatism, in those less acute forms of rheumatic fever in which the pains are sluggish. The hot water of J. Passchau has been a favorite remedy both in this country & in the Continent, given in large doses, in a large quantity of water, to prevent the stomach suffering from too strong a solution of the pulp.

1-Fallen found the remedy more well & the
Patient, but he thinks that the disease was not much shortened by its institution, still it diminishes the heart action & increases the fluidity of the fibrin of the blood. Sir Golding
Brid recommends that the acetate of potash should be used instead of the bicarbonate on account of its having a life-giving action on the stomach. The alkaline & their salts will be found very useful in the treatment of
pneumonia. These are distinctly indicated by the state of the system; experience has shown that they are the most successful
means of cure. Sir Barry has lately published the results of his treatment by the
bicarbonate of soda given in doses of from 3/4 to 1/2 dissolved in 3 oz of water, to
be taken every two hours. The results are most
satisfactory. Other salts, as well as the
bicarbonate, have been employed—dilute bicarbonate of soda to 7 oz with equal parts.
Sir Owen Parry has pursued a very dif-
f erent line of treatment, namely that of
lemon juice; when his cases have been examined it will be found, that the fact
In this book about 4 weeks to get better—a period in which the disease would get well of itself. Having considered some of the principal remedies that have been employed, let us look into some of the plans of treatment that have been recommended for the cure of rheumatic fever.

The plan of treatment that should be carried out we think should differ according to the stage of the disease. Should the case be one of the very acute before the disease is fairly established, bleeding followed by a dose of quinine and succanana should be tried as recommended by J.を受け

is on. As believes that the best cure of acute rheumatism can be made in this way. Without the use of the liquor, I only, with a full dose of the quinine I have seen the pain

effect quickly. In this case all the primary signs were for striking that the patient, who had had rheumatic fever before, had no doubt but that another attack was coming on; he was chilly, had frequent

signs occasioned by the slightest draught of
of cold air, he was languid and had an app-
petite but especially there were decided pneu-
monic pains in his breast arteries, in fact he
had all the piles, which he had before experi-
ced as indicating an attack of pulmonary
fever; yet by employing early the use of
ipecacuan a proper treatment was established
continued during the night; all these
disagreeable symptoms subsided. I must
day the patient was quite well.
Unfortunately however we do not usually
for the patient until the disease is far
advanced, then there is no hope of
putting it right; it then becomes our duty
to conduct the disease to a speedy favor-
able termination. For this purpose
many combinations of the remedies the
use of which in this disease we have
glanced at, have been proposed let
us probe into some of them.
To illustrate this let me add a combination
which he considers will be found most
efficacious. After the use of the funnel,
if necessary, 8 of Calomel to be

Opium are to be given every night, followed in the morning by a full black dose, during the day a saline draught containing an 1/2 of a grain of chloric and 5/10 of Dovers powder, is to be administered. Under this treatment patients get well on the fourth day, if the gums become affected, the colic should be dropped, if the case be severe, another grain of opium should be added, but the colic opium & black dose & saline draught must be continued as at first if the gums do not differ. We have before stated our objection to this mode of treatment. When we consider that so good & easy cases are affected in the same time, with greater confusion to the patient, I think that its adoption is unwarrantable. Without describing the several modes of treatment that have been brought forward, we may say that the most fully a combination of remedies carries out the following medications, the more successful will it be. Saturate as much as possible the elimination of the poison from the body.
term, reduce its acid condition, dilute the urine, which is per distressing to the patient, avoid all exposure to cold, see that the skin never becomes dry, reduce if possible the amount of urine in it, let\'s acid urine may be plummatric.

All these indications must be carried out without inconvenience to the patient. If I may the nearer we fulfill these, the more successful shall we be in the treatment of phthisic gum. Two plans of treatment, which have been very successful, are 1. S. Good and then F. Fuller; attract our attention. Dr. Good recommends that, the jewels having been removed, the spine of 2. Gum and also one of Sperchian hot should be administered to restore flesh. Once done, such treatment should be continued until treatment has been reduced. Advantage will sometimes be derived by combining with 3. Powders, the powder of gum, which is supposed to have an alternative influence over the disease. Should this mode of treatment not succeed in two
writes the disease assumes a formidable character, Calmnel need as an alternative should be employed, if the jama severe affected it should be discontinued & CO. Chican which may be given along with, or before the Mercury, should be continued with one of the pills of phosphorus tried in its stead. Should disease of the heart or brain come on, Dr. Wood recommends, cupping & extensive plastering over the affected limb, as well as a plaster in the neighborhood of a joint in order to invite the disease back to its old seat. Dr. Wood has so much confidence in this mode of treating phlegmatic fever, that he would not leave it to try any other plan. Dr. Fuller plans is somewhat similar & has been very successful. He recommends blending in the young strong spirit the a mixture of Calmnel & opium followed 3 hours afterward by the use of a draught of fever-Jus, along with castor oil & Coca 3/2 & 1/2 on of Vinum etchier. The opium is to be given pie as to relieve fever & the further use of
x.  Qamutis Satini zif
Codex Justinii, Zef
Finis cehuci, M. XV
S. Pnii, M. VI
Dr. to be treated every 6 days.
Fungation is to be regulated by the state of the intestinal coagulums. At times I medicinal pills should be used in combination with icho-
reum, opium, opium, sometimes antimony. If
the pain be severe a grain and a half of
opium along with ipaeman will serve
to give relief. At the same time you must
watch the operation of the medicines hist
constipation or crampism be produced on the
one hand, or diarrhoea on the other. If the
stomach be intolerant of large doses of medicinal
pills, which however seldom happens, great
benefit will be derived by adding a little
lemon juice and alkaline carbonate to the
mixture forming a saline effervescent draught.
Under this treatment great relief is experienced,
so that in a few days, the patient becomes alkales-
the fever falls, the constipation is no more
pain gone away, and at the end of
three or four days the mixture may be
discontinued, and eupana substit-
tuted during the day or the eve-
ning. Should the fever be out
of order, a wine pill with the

acetous extract of chelidonium may be ad-
minisrered. If there is any tendency to
the return of pain & fever, the quinia must
be immediately discontinued & recourse
had to alkalies. If the skin is not per-
forming its function a little quinacrinum
should be given. Sauller does not
confine himself to internal remedies, but
recommend the application of hot alkaline
baths & lotions to the affected joints.
Here must also be attended to, the pa-
tient must be kept low, but on account
of the great drain on the system from
the sore joints may be given in
moderate quantity 2, to supply the
least amount of fluid that passes off the
skin ditheat such as whey, thin gruel
or should be given. After the fourth
day of such treatment, the patient
was generally found well, no heart com-
plaint or complication occurred in any case after the first
visit was paid under this treatment.
Sauller's plan of treatment seems to fulfill
most of the indications stated above.
It is consistent with theory, this been found most successful in practice. It therefore seems to be the best that has been brought forward.

Waring considered the treatment proper in a simple uncomplicated attack of Rheumatism. From this, I shall briefly consider, make a few observations on that which should be employed when inflammation of the joints occurs of the heart supervenes.

The remedies to be employed are the same should the complication be due to rheumatism. General bloodletting is purposely required, the patient usually in sufficient reduced already, yet should a case occur in a person more individual than this case is in its first stage, there is a reasonable prospect of staying the inflammation. Penicillin ought to be had recourse to. Such cases, however, occurring, rarely happen. I usually find that a local bloodletting is sufficient.

Leaching is the preferred cause here is occasioned by the presence of this cupping glasses. Always should pleasure be employed.
For the purpose of reducing the inflammation, but also even when the patient is extremely febrile, to relieve the deadly fever that accompanies frequent inflammation of the membranes of the heart. Blistering and sometimes fevers be found to give great relief. The antiseptic regimen should be enforced and healing should be made rapid to affect the system with the hope that we shall proceed further foundation and despite the abstention of all foreign matter. The power of this remedy in those inflammation of the pericardium is not now so universally acknowledged as once it was, and even strenuous efforts of this metal. Faced that they cannot depend upon it for either the facilitation of the evacuation or absorption of the effusion. Nevertheless in some cases still it seems to do good and why should we deprive our patients of the only chance they have? If mercury does not good in such a case it cannot do much harm.

During the whole course of rheumatic fever we should always be on the lookout for cardiac complications, remembering that
in some cases we may be able by a vigorous prevention of [illegible] the inflammation part.

It has been my endeavour in the pre-
ceding thesis to point out the true
Pathology of Rheumatic Fever and
ascertain its best treatment. It have
entire on all the plans that have
been proposed for the cure of this dis-
case, and all the theories of its
pathology, would have been tedious, and
unprofitable even if the money calls on
a fourth year student of Medicine,s
time would have permitted it. I am
convinced that what I proposed to myself
has not been fully carried out, but the
subject is so extensive that it would
require a volume of several hours duration
to trace even in slight outline all that
has been recently written on Rheumatic Fever.
Hugh Granger Stewart
Edinburgh.