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Early Doctors of Medicine and Physicians of Maryland

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The project team who investigated and organized the tables of contents were: Richard J. Bollman, Historical and Manuscript Collections; Alan M. Blackman, Metadata Management Librarian; Audrey Stemmons, Lovely, and Margaret E. Welsh, Special Projects Librarian.

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Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940’s. The original tables of contents for the bound volumes contained multiple errors in authors’ names, titles, and/or years. To address these errors, an additional “Corrected Table of Contents” has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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An Inaugural dissertation
on Asthma, submitted to the
Medical Faculty, of the University
of Maryland for examination, by
Tho. J. L. S. Nottingham, of
Virginia. March 15th, 1830
Inaugural Dissertation

In entering upon the practice of medicine nothing could be more useful to the young practitioner than a correct system of nosology; yet it is what the young practical physician has never had to guide him correctly; when called to administer for the ravages of diseases which destroy so many of the human family. It appears upon a superficial view that nothing could be more easy than for a practical physician to describe the different symptoms attending different diseases, and in fact this is in some degree probable, but that he can describe every symptom which may attend a disease under whatever circumstances it may present itself is what I think impossible. We may by strictly attending to the rules which Anato-
logists have laid down be enabled to detect certain symp-
toms which are regular attendants on certain diseases.
and those symptoms may be sufficient to point out to us the true character of the disease, yet we sometimes find the disease accompanied by symptoms which no physiologist has ever yet described. We are well aware that the physiologist can point out those diagnostic symptoms which will always and under all circumstances enable him to distinguish Canine madness from syphilis; and also know that they cannot be changed from one to the other, but we cannot agree that the physiologist can distinguish inflammation of the pleura, from that of the lungs themselves, with as much precision as can the Chemist distinguish gold from sulphur.

Every one who is conversant with the important science of medicine must readily admit that it is far from perfection in consequence of the many causes
which are daily generated to produce new diseases.

These are circumstances which will render abortive any attempts to form a perfect diagnostic system of morology. Although we cannot look forward for a perfect system, yet we are not insensible of the merits of those ingenious though we must say imperfect, ones which have been presented to us at different times and by different authors, among whom are to be found some of the most distinguished cultivators of the medical sciences and we are happy to say that they have not laboured altogether in vain.

We have said that new causes are daily generated to produce new diseases, and we might say different types of the same disease, but in saying this we do not wish to be understood to say that those regularly organized diseases which invariably present themselves
upon the application of certain poisons, are altered in their essential character, but are only modified in consequence of the different circumstances under which they appear. That some unknown causes produce new diseases is obvious from the fact that but a few years ago Scyllatine was not known in this country, and we may say in any other country. From one of those accursed Cultivators of Medical Science I will take the character of the disease of which I propose to treat.

Asthma, the subject of the following essay has been confounded with many other diseases which are totally different in their Causes as well as their essential character. Every difficulty of breathing or that sense of breath from whatever cause has been denomi-

nated asthma by the ancients.
The difficulty of breathing which takes place in
Pneumonia, Phthisis, Anemia of the Aorta, Hydrosphe-
cardia, and even in some nervous diseases as hysteria to
have been styled with the appellation of Asthma and
there as well as many other cases we have cause to
regret that authors who should have known better
have been so fond of lengthening out the catalogue
of diseases as to enumerate merely the symptoms of
diseases for diseases themselves.

Asthma has been considered by the illustrious
Cullen as well as by many authors as a spasmodic
disease and we readily agree with him in consid-
ering it thus in some cases but cannot agree to
follow them through his whole point of spasmodic
symptoms. We think that the symptoms of Asthma
may be accounted for without the superfluos in-
terposition of spasm and we have not much doubt but
that Dr. Bullen might have accounted for them
differently had he not been so strongly prepossessed
in favour of his Spasmodic doctrine. Whenever we
find Dr. Bullen entangled in the babyninth of perplex-
ities we are sure to hear him calling out for the
aid of spasm to extricate himself. We can very ca-
dily conceive how the Spasmodic affection of the
diaphragm, intercostals and other muscles of res-
piration may diminish the capacity of the chest
and thus produce the difficulty of breathing.
We can also conceive how the debility of the vessels
of the lungs and the consequent accumulation of
blood in them may also produce asthma, but we
cannot believe that Asthma can be produced by a spasmatic affection of the bronchial or tracheal

Every attempt of anatomic to find muscular fibres of sufficient power in the bronchial or tracheal to produce Asthma has been concidently failed.

We must then say with Dr. Potter that Asthma is constituted by a congestive state of the lungs and we perceive that Dr. Cullen was not altogether ignorant of that cause when he says that asthmatic fits seem to depend upon some fulness of the vessels of the lungs; it is probable that an obstruction of perfusion and the blood being less determined to the surface of the body may favour an accumulation of blood in the lungs and thereby be a means of exciting Asthma.
Symptoms.

From the definition which we have already given of the disease, it is understood that a difficulty of breathing occurring at intervals with a sense of constriction in the breast are the most usual symptoms. Generally in the evening preceding an attack of asthma, the spirits are much affected and the person experiences a sense of fulness about the stomach with great lassitude and drowsiness; with a feeling of straitness in the lungs impeding respiration. The difficulty of breathing continuing to increase for some time, respiration is performed with difficulty, the speech becomes difficult and uneasy; a propensity to coughing succeeds and the patient can no longer remain in a horizontal position being as it were threatened with immediate suffocation.
You saw the approach of morning, a remission of these
symptoms generally takes place to the great relief
and satisfaction of the sufferer. I have just said that
the paroxysm very often comes on in the night which
may be accounted for by considering that the body
is in a recumbent position as well as the defence-
life state in which the system is during sleep.
The face during the first paroxysm is generally turgid
and the eyes are protruded but in the more advan-
ced stage of the disease the face pale and emaci-
ated. A paroxysm is excited by exercise, by ascending
a flight of stairs, by facing the wind, by anger,
and sometimes by joy, on consequence of which the
patient generally seems disposed to sadness and
avoidance of exercise or any thing which may
hurry the circulation of blood through the lungs.
When the disease has continued for some length of
time the vital as well as the natural functions
are impaire in consequence of the blood not being
decarbonized by the lungs hence Dyspepsia and
dall its conseguens. This disease according to Dr. Bul-
ken though often threatening immediate death
ever seldom produces it, and persons often attain
to old age in this disease.

When it does prove fatal it is by a congestion
of blood in the lungs which compresses the air-
cells and thus cutting off the Communication
between the lungs and atmosphere causes suf-
location. It has been said that this disease some-
times produces Rhitis Palmonalis, but this perhaps
is never the case unless the patient be scrofulous.
It sometime produces Hydrothorax by obstructing
the vessels of the thorax and causing an accumu-
lation of blood and effusion of serum.

Asthma has been divided into many species as the
Diagnosis.

Asthma as we have already laid has been confounded with many other diseases as well as symptoms of diseases, as Dyspnea, Anurism of the arteries, Angina Pectoris, Pneumonia, Hydrothorax.

It is unnecessary to point out the difference between Asthma and Dyspnea, as the latter is only a symptom of the former disease, as well as of many other diseases.

Asthma may be distinguished from Anurism by the gradual approach and constant presence of the symptoms of Anurism. While in Asthma there is a peculiar straining of the thorax and when the Anurism has enlarged considerably the
publication of a tumour in the situation of epulis
which no longer leaves a doubt as to the charac-
ter of the disease.

From Angina Pectoris, by a numbness down the
arms which is an attendant on Angina, which
is not in Asthma. By the symptoms of Angina
suddenly going off while those of Asthma go
off gradually.

From Pneumonia. 1st. By the patient being an at-
tendant on Pneumonia, which does not attend Asth-
ama. 2nd. By the patient being more easy in a
recumbent posture in Pneumonia and by being
more easy on one side than the other, which is
not the case in Asthma. 3rd. By the face being
on one side generally in Pneumonia while it
is deep seated and not well defined in Asthma.

From Hydrops Thoraica. By a dropecal diarrhoea and
adenitious swelling of the feet and legs which
generally attends the latter disease with a reac-
city of urine. In the advanced stage of Hydat-
diae, a fluctuation of water may be perceived
which removes all doubt on the subject.

Causes of Plectonic Asthma

We will divide the Causes into predisposing and ex-
citing Causes, and first of the Predisposing Causes.

Which are debility of the lungs by whatever cause
produced, by congestion of blood or of serum humoral
in the lungs, noxious vapours, impure and smoky
air, cold and foggy atmosphere, the reception of
dust into the lungs, sudden changes of temperature
by copious or gouty acrimony, or by repeated
attacks of Cataract, or many other Causes which
tend to weaken the lungs.
Exciting Causes.

The exciting causes are such as accelerate the circulation of blood through the lungs at violent exercise, great emotions of the mind, anything that is calculated to excite the passions, by ascending a flight of stairs, by a sudden change from a dense to a rare atmosphere, by ascending mountains, or by burning coal or any other combustible substance in the room, by a repulsion of any excitation from the surface of the body which causes a determination of blood to the cilia and consequently to the lungs, by a suppression of any long continued expectation as the insane do. Asthmatics generally enjoy better health in cities than in countries or valleys than on mountains.
Prognosis

Our prognosis will be formed according to the urgency of symptoms. If the patient be seized suddenly and the attacks continued a great length of time, with considerable severity, and if those attacks will not submit to medical aid, or from peculiar circumstances medical aid cannot be obtained, the prognosis is unfavourable; but if the attacks are neither frequent nor severe, the constitution not impaired, and the patient is young, and medical assistance is promptly obtained, the disease scarcely ever proves fatal.

Method of Cure.

It now remains for us to point out the most approved method of Cure, which is allowed to be a matter of the greatest importance. If the plan of treatment I lay down may be considered proper I shall feel much pleased, that that there is any originality in it; but that I have been fortunate enough to select from the many proposed plans
the most appropriate one. One which if it will not cure
the disease, always if properly managed always
leave palliative. From the pathological view which we
have taken of this disease, the remedies very naturally pre-
sent themselves: and first, in rank, is bloodletting, the mode
of which is obvious to every one, by taking off
that blood under which the vessels of the lungs are labour-
ing, and by equalizing the circulation. We are well aware
that many authors are opposed to bloodletting in this dis-
ee, but knowing that the success of practitioners in this
disease must depend almost exclusively upon the lancet,
we do not hesitate to recommend it; in fact this is the
most prompt and only certain remedy in a case of
Asthma. Sometimes from a long continuance of this
disease, the vessels of the lungs become so much debilitated
that they are no longer able to contract and empty themselves,
after reseccion and the vis a teno taken off their pleuris,
act very beneficially by strengthening the weakened vessels.
From these conclusions we have already drawn viz. that
The symptoms of Asthma are dependant on a want of sufficient expansion of the lungs and free circulation through them, sometimes appear also to be useful, by causing those long inspirations which are consequent upon the violent exercise made in coughing, as well as the general relaxation and evacuation thus produced.

It has been remarked that when a patient labouring under Asthma is attacked with Diarrhea that the symptoms of Asthma have immediately disappeared. From the above fact we are induced to suppose by keeping up an artificial Diarrhea that Asthma might be cured. Cannot we use bleeding and purgatives to act in the same way by reducing the body? Diet should be used abstinence and such articles should be used as are easy digestion. Silver should always be worn next the skin which keeps up a determination to the surface and thereby diminishes the flow of blood through the lungs. The patient should take moderate exercise between the paroxysms but not sufficient to produce fatigue. Sailing is thought to be the most salutary exercise that can be taken, and voyage to sea has been known to cure it when every other remedy failed. Riding on horseback should be practised if possible, if not riding in Carriage should be substituted...
All modes of geratation are beneficial when combined with good effects. Change of climate is perhaps superior to any thing that can be done towards the cure of this disease. Hard labour should be practiced, which might increase the venous of the body sufficiently to overcome the predisposition. The bruise should be kept open to prevent the retention of accumulated pus. In the paroxysm, our remedies should be prompt and energetic. As death is commonly produced by suffocation, the compression should be taken off, and for this purpose bloodletting is superior to any other remedy. Authors have ordered a blister to be applied over the region affected, but as in all probability they act through the medium of the nervous system, would it not be better to apply them to the inner side of the thigh or arms as they are more sensible? When Asthma is attended with great difficulty of breathing, Digitalis combined with opium has had the most happy effects.

When attended with a troublesome dry cough, Spica huanha in small quantities, combined with the above articles, adds much to their efficacy. Other remedies, such as must opium camphor and others of the same class have been used with good effect.
An essay on Hydropoicism
presented to the Provost, Trustees, and Medical faculty of the University of Maryland, for examination by Edwin Conant, Virginia a candidate for graduation, March 20th, 1836.
Dyspepsia

By dyspepsia in its most precise sense, may be understood that state of the stomach, in which its functions are disturbed, all the secretions are vitiated, and thus the gastric juice may be either deficient, or secreted in too large quantity, or vitiated in quality whereby the coats of the stomach become involved with a thick tenacious mucus. There is also a morbid condition of the nerves of the stomach, a form general to para, or defect of the whole nervous system. The primary symptoms of dyspepsia, are a sense of oppression after eating, nausea, and sometimes vomiting, sour eructations, purid tongue, fetid breath, uneasy sensations about the epigastrium, vitiated appetite, constipation. The pulse is small and curved, and the depression of spirits, and in some cases amount to hypochondriasis. There are also certain anomalies, affections of the spine pain in the chest and head depression, show of asthene vertigo and palpitation of the heart, the scalp, in some cases becomes exceedingly tender, amounting almost to the douleur, hypostatica, tetanus, &c. are also symptoms of dyspepsia, the evacuations from the bowels are mucous, many in their appearance, sometimes they have a clayey appearance at others a bilious hue, not being
As you can see, the text on this page is quite dense and written in a flowing, cursive script. The content appears to be a detailed narrative or exposition, possibly on a philosophical or historical topic. The handwriting is legible, although the style is characteristic of historical documents, which might require careful reading to fully understand the meaning.
arrested the case after a while assume a more acute
the vascular system becomes involved and we have
the symptoms of febrile excitement the causes of dyspepsia
may be divided into those which act immediately on
the stomach and those which affect that organ
through the medium of nervous systems of the
first class are excess in eating or drinking or improper
food an undue limitation of diet the excessive use
of tobacco wine acids spirits and too frequent use of
medicines such as quinine are very apt to bring on the
disease; indolent and sedentary habits intense study
close applications to business within close fire disappo-
pointed ambition excessive anxiety exposure to cold
suppressed perspiration and cold feet. Dyspepsia is not
always idiopathic it is sometimes symptomatic of the
disease of the liver spine pancrea or the brain. In other
cases it is generally found flabby and relaxed with
some alterations in structure and enlargement of the
mucous follicles. In other cases we find evidences of
chronic inflammations. Morbists have uniformly consid-
ered this disease as consisting in debility of the mucous
coat of the stomach of deficient secretion. In its more
encrusted the disease is purely nervous.
The continuing inflammation with its ordinary consequence follows. In the first instance there is functional disorder, the digestion is very imperfect attended with flatulency, sour excretions; the muscular power is also impaired by the same cause and the food is in consequence not driven into the bones resistance the load while appressed. In the second stage of the disease inflammation frequently supervenes and stirs follows tenderness of the epigastrium, hard corcus pulse, warm skin, and burning of the palpe of the hand. The first indication in the treatment of the disease is to pay strict attention to diet. We consider it the most important part of the treatment next. To gentle cathartics which evacuate without creating irritation, a Rhubarb, with calcined magnesia or tincture of Rhubarb, before resorting to tonics we should carefully ascertain the inflammation does not exist. Dyspepsia is so often regarded as mere debility of the stomach if however the symptoms of inflammation do not exist it may be proper to resort to tonics for the purpose of restoring tone in the integrity of the disease particular affections which if neglected react on the disease.
however we palliate these symptoms we should keep the permanent cure constantly before us. The first of these which should be noticed is Cardialgia which is a very painful affection arising from acidity. To correct this line water and milk or Mercurialis or any of the alkalies may be used; sometimes the stomach is thrown into spasms called gastrœalia when that is the case opium should be used. A glass of milk will sometimes relieve when opium fails. Dyspepsia or water brash is another symptom of dyspepsia it is produced by too much use of salted meats it also arises from excess in eating or drinking or from the habit of distending the stomach with large draughts of cold water. The sick headache which is also symptomatic of dyspepsia if all other means fail in the treatment of dyspepsia Mercury is next to be resorted to it may be given in small doses combined with Fræca and three grains of blue must may be combined with one grain of ipecac and this should be given at night and purged of in the morning with a little Magnesia. This course should be continued until the system is improved by mercury's action.
Mr. Wilson Philips has recently used galvanism with advantage from the following view of the pathology of dyspepsia; he believes the disease to consist in diminished nervous influence having set that digestion was suspended by tying or cutting the nerve which supplies the stomach, believing also that the nervous and galvanic fluids are essentially the same he has recommended galvanism to supply the nervous deficiency which exists, what has been said above relates to the simple form of dyspepsia; it is always prone to change the primary form of irritation for that of inflammation, the latter is known by a strange sensation of heat and pain, head cooked and quick pulse and diminution of the hectic kind, hoarse cough, tongue, deform of the hypochondrium and epigastrum, it may be readily mistaken for Pulmonary Consumption and may indicate that disease as symptoms of Pulmonary disease frequently result from irritation in the stomach and caused arising from other causes such as mucus and it is by acting on the duodenum tissue in these cases small and repeated bleedings are necessary as in all other inflammatory disease of a chronic form local bleeding and blistering should.
resorted to small doses of ipecac are now of great value as it appears to act as an alternative imperfectly changing the condition of the stomach to its natural action, the bowels are to be attended to the neutral salts although by no means suited to simple cases of dyspepsia unattended by inflammation are here the proper remedies, having by these means reduced the activity of the symptoms medicine must now be resorted to so as to obtain alternative effects or if there be much vascular obstruction salivation should be brought on during the inflammatory stage the diet should be as low as possible. When dyspepsia has arisen from intemperance accompanied by vomiting and spasm opium and muriatic alkaflx are to be used and to affect a permanent cure the patient must undergo a complete reformation in his habits. Little if any benefit will be derived from medicine. Strict regimen of diet is very necessary in the cure of dyspepsia, the first rule to be observed is to permiss your patient to dine from only one dish and a small quantity of that at a time but frequently repeated so as to keep the stomach constantly employed, persons liable to this disease
If I C C S ...

... the skin is very important. Exercise on foot or on horseback should be recommended; the best exercise is walking, as it gives tone to the stomach. Dyspeptic patients should sleep upon a hard mattress, one made of hemp or buckwheat; they should also retire early to bed and get up early in the morning. I think it advisable to lay aside tea and coffee altogether and place the patient on a milk diet. In some cases he becomes worse, and some stomachs at the commencement of the diet in such cases it is better to add lime water to the milk, all acid drinks are injurious. Spirituous drinks should also be prohibited. If any stimulating drink should be necessary, a glass of old Madeira wine some persons can take. Ale and porter, the bread should be baked very hard and kept a day or two before used; the unfermented bread such as slate bread, crackers, which are made up with nothing but water and baking very hard is the best. Bread which can be used, bread should be a day or two old before used; bread which is made up of long or butter is very injurious to dyspeptic patients. Ginger bread made up with a warm arrow...
is proper food for a patient in this disease, since simply boiled with a little nutmeg is very easily digested. Roasted beef done raw may be considered the best animal food together with mutton in milder cases. This article should be used without any condiments except a little salt. If the patient have been accustomed to salted provision you may allow him almost no young animal food can be used, milk foods are much more digestible than tame.
An
Inaugural Essay
on
Rheumatism
for the degree of Doctor of Medicine
Respectfully submitted to the consideration
of the
Trustees and Faculty
of the
University of Maryland

By Henry Schultz
of Baltimore

March 15th, 1830
An

Inaugural Essay

On

Rheumatism

For the degree of Doctor of Medicine

Submitted to the consideration

of the

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of Maryland

By Henry Schultz

of Baltimore
An Essay

On Rheumatism

The characteristic symptoms of Rheumatism, as put down by most medical writers are, Pyrexia, pain about the larger joints, and extending some distance up those muscles, which are inserted into them; it is divided into acute and chronic.

The Acute

Comes on by lapse of time and chills, with a numbness with of the joint, which is followed by great heat, thus pain in the head, with acute pain in the joint, very tender to the touch, and a high degree of inflammatory fever.

The Chronic

Is rather a consequence of the acute, when it occurs it is owing to the patient's having had the disease in the acute form, and not having been properly treated, it is attended with local inflammation and no general fever.

This disease occurs most commonly in the spring and
Fall, owing to the frequent change of weather in those seasons, and for the same reason it is more prevalent now than formerly, a person will be more liable to it if who may have become weakened by some other disease, but any person may be attacked with disease, who has excited himself to a great degree, and suddenly goes into a damp atmosphere, and thereby checking the perspiration.

It has sometimes mistaken for gout, but it may easily be known from gout, for gout attacks the smaller joints and Rheumatism the larger, in gout there is a whitish substance resembling chalk deposited on the joint, in Rheumatism there is not. Gout is brought on by intemperance in eating or drinking. Rheumatism is brought on by exposure to dampness. Gout is hereditary. Rheumatism is not, we will therefore seldom mistake by learning a history of the case.

Rheumatism mostly attacks persons between the age of thirty and forty years, it seldom attacks old people for the first.
time, it occurs most frequently in seaports, but I do not suppose
there is any place where there is much change of weather,
that we will not find the disease, in this country it occurs
most frequently in the middle states, it seldom proves fa-
tal except in susceptible persons, Dr. Potter says he saw two
cases in which it suppurred, it may produce para-
ysis of a part, by the tendons becoming thinned and
pressing on a nerve, it is sometimes mistaken for
Rheumatism, but in such cases it may be known by the
domptoms, in pleurisy the pain is stationary whilst in
Rheumatism it changes to some other part &
Causes

Obstructed perspiration caused by great exertion, and
going into damp atmosphere, lying on damp ground
between damp sheets, or the body being exposed to a
current of damp air riding out in an open car-
riage during damp weather, especially when the
body is in any way debilitated, may all produce
the disease
Symptoms

The patient for some time previous feels drowsy, and has chills; he also feels acute pain in some one or more of the joints, which sometimes remain stationary, but most generally moving about the body some times moving to different parts of the joint, the pain is much increased on pressure, the least motion is also painful to the patient; he generally has a full head ache, white tongue, rapid and frequent pulse attended with a very high inflammatory fever, pain in the joint, much increased after the patient has become warm, in bed, which he tries to relieve by turning from one side to the other, this will slightly relieve some but when the bed becomes completely warmed, it will no longer do so, he has considerable loss of thirst, loss of appetite, disturbed sleep, the least noise awakening him, the joint becomes
Red and there is effusion of lymph, which makes the joint appear very large.

Treatment

Bleeding I think one of the best remedies we can use in this disease, and if carried to a proper extent will in a short time reduce the inflammation, early bleeding and purging I think would in many instances cure the disease exclusive of any other remedy. Most Physicians stop short too soon, they bleed once or twice and then leave that, and take up a new plan of treatment. I think the pulse should be completely reduced before any thing stimulating is introduced, I think it is owing to this that we have so many cases of chronic Rheumatism, and sometimes even Paralysis.

Bleeding both general and local, combined with a low diet, is necessary, avoiding all stimulating
drinks, leeches in preference to cupping, but it意见
can not be obtained too may use cupping, if there is
much effusion. Friction is very good to excite the
absorbtion. Diaphoretics are good, after the inflam-
mation has been somewhat reduced. Mercury
is of no benefit in the disease except as a purgative.
but I would prefer almost any other, for it has a tena-
cy to keep up the action of the heart. Dr. Potter recom-
mands Colchicum in the second stage, he says
the only objection to it is, that it impairs the tone
of the stomach, it might be combined with some
thing that could obviate that, and still not impair
its influence over the disease. The cold bath may
be of service in the inflammatory stage. The broods
should be kept open by purgatives the neutral
baths I think are to be prepared for this purpose.
The warm bath may be employed after the inflam-
mation has been somewhat reduced.
The Sciatica, the most difficult to cure, Dr. Potter recommends bleeding in this until we relieve pain, he says if this will not benefit we may use coloan combined with opium, which he says will most likely prove successful. Mustard cataplasm have been used in chronic Rheumatism, as also the tincture Cantharides, to relieve pain. Guaiacum may be given internally, it swells and does not increase action, in chronic cases it is not sufficiently powerful, and we have to combine it with ammonium stramonium is very good. The leaves boiled and applied to the part, as warm as the patient can bear it. The inner bark of the common Holly in decoction is useful. 3 to 1 gallon of water, boil ten or fifteen minutes, dose from two table spoons full to a tea cup full, this is very good. The arsenical solution has also been
used with some advantage, it may be used in any stage, it acts on the skin. Dr. Better says bal-

Dom of Sulphur has cured the disease where every thing else had failed, dose a teaspoonful,
increased to a Table spoonful, three times a day, a change of climate to a uniform climate may be of considerable advantage.

Counter irritation kept up near the part affected, where there is a thickening of a tendon, I have known to cure a patient who had been afflic-

for eighteen Months the disease was situ-

ated in the heel, the patient reduced the swell

by constant and Tight Bandaging, until he could wear a boot which he had made larger.

Sufficiently small however to rub the heel the heel which acting on the part, immediately in the neighborhood of that affected completely reduced the swelling. As
that he can walk now without any inconvenience.

This patient at one time disagreed of ever getting well. Blistering I would not suppose was of much benefit, where the part was much exposed as on the knee. I had a patient who had the disease generally in both of his knees; the one was blistered, and to the other I used camphorated spirits as a local application, the one with the blister was much longer getting well than the other, and the least change of weather would affect him, in the knee which was blistered. I would suppose that if we could bring some thing to act on a joint, in the manner in which a tight boot does, to a herb it would be of considerable benefit.
An Inaugural and Experimental Inquiry
As to the formation and growth of
Stone in the bladder,
And the operation of Lithotomy with the Scalpel
For the degree of
Doctor of Medicine
submitted to the Examination of the
Roger B. Taney esq., Provost
The Trustees and Medical Faculty of the
University of Maryland
by Richardo Parran
Hagers Town
Washington county
Maryland
1st day of April 1830
In accordance with the rules of the University of Maryland, it devolves upon me being a candidate for the Honourable degree of Doctor, to present my views on some subject connected with the science of Medicine or Surgery.

I have selected for the subject the formation of the stone in the bladder, and the best method of extracting it after its formation. Lithotomy is the operation of extracting the stone from the bladder, was practiced by the Ancients, and owing to the danger attendant on the operation, many experiments have been made with the object of discovering a solvent for the stone; but, notwithstanding all the experiments to accomplish that desirable object have completely failed, and we are compelled to revert to the operation of lithotomy once the stone is formed in the bladder. It is true, some cases have been reported where the calculi have been discharged, after the use of certain medicinal articles.
Lithotrity is a remedy for the stone; but I am of the impression that the breaking up of the stone, could not with propriety be attributed to the medicines made use of, but it was merely a casual occurrence, which would have taken place had the medicine not been administered, as we know of many cases where the calculi has been discharged and passed off without the aid of any medicine. That medicines may be administered which may prevent the predisposition to deposit stone, I am willing to admit, and I believe that such articles will correct the disorder of the digestive organs, and be effective. As I am inclined to believe that the stone is deposited when there are arrangements in the body to produce it, I have come to this conclusion from my experiments, on the urine of different individuals in a state of health, and when indisposed. It was observed in placing the urine of a person in good health, in a large glass jar, and letting it remain for several days without being disturbed, and then pouring it off,
That deposit had taken place. The urine of the same individual, when somewhat indisposed, was collected and placed in the same bottle, and on remaining two or three days, a considerable deposit of calculi matter took place and had coated the sides of the glass bottle, and when removed presented crystals of metatitic nature. When the indisposition remained several days and the urine was all collected a very considerable quantity of stone was deposited. It may be necessary for me here to mention the symptoms under which the patient laboured at the time the urine was collected, namely, rise of the head—thirst—craving appetite—dry skin—and in fact all the symptoms of diabetes or indigestion: a slight purgative and strict attention to diet would remove those unpleasant symptoms, and immediately on this being removed, and the patient feeling better, the calculi would cease to be deposited.

Another fact perhaps worthy of record is, that if
Subjected to the experiments to which I have alluded, I should indulge in the use of ardent spirits or wine that immediately on the use of those articles a deposit would take place from the urine.

From facts thus thrown together, I am induced to believe, that in a healthy state of the system, the urine contains no redundant portion of calculus matter, but immediately, that the Animal machine becomes thrown into a state of derangement, by the food not being properly digested and a cell of calculus matter will exist; and if a nucleus should happen to be present in the bladder at the time of such derangement, a stone will be the consequence; as the redundant portion of stone matter contained in the urine will form around the nucleus.

In many cases of stone in the bladder, we find that the patients have laboured under symptoms of the disease perhaps for twenty or thirty years; and many of the calculi when they are extracted, after...
remaining in the bladder after that great length of time will be found to be of small size—others again, will be of a very large size, although the patient may have complained but a few years. I have noticed that in young persons of good constitution that the stone will accumulate but slowly, on the contrary in old persons with feeble constitution, where the digestive organs are frequently deranged, a rapid increase in the size of the stone will take place.

These circumstances would again go to strengthen the opinion which I have adopted in relation to the formation of the stone; and to prevent this deposit, diet and mild cathartics medicine, I have seen most effectual. I have with much attention read many cases on this subject, and great object of the writers appears to be the introduction of such articles into the stomach, as will combine with certain acids, which they believe to be redundant in the fluids. And they have recommended magnesia &c. to
combine with the excess of acida, which they believe to be present, thereby to correct the disposition to varie
s. I have admit that magnesia, will correct the state of the system, by acting as an aperient and cor
recting the disordered state of the digestive organs, to little rhubarb and many other articles to teach
there to mention. The predisposition to the deposit of stone may be removed by diet alone.

My much respected friend Dr. John W. Anderson, at that time Physician to the Colony of Liberia, was
in the habit of relieving himself by abstemious diet. He could tell by his feelings when a deposit
would take place from his urine, and immediately to his diet he would pay particular attention, unless he might
be relieved. He was also in the habit of collecting his urine for the purpose of experiment, and in-
variably found a deposit to take place, when he was labouring under symptoms of Dyspepsia.
I have also noticed that in all the cases reported, where there has been a calculus deposit in any other part of the body, as for instance, that great derangement existed in the functions of digestion. Upon the whole, I am convinced that it would be far better for our patients were we to attend particularly to the general arrangement of the system, which produces the deposit of Lithic acid, and Urine acid, thereby removing the cause which produces the deposit, than to introduce into the stomach Muriatic acid, Magnesia, Soda &c. for the purpose of neutralizing after they exist. I say relieve the stomach and bowels, this being done, there will be no deposit of Lithic acid, the skin will perform its proper function, and the kidneys will take care of themselves.

In support of the theory which I advance, I have reported a case which came under the care of Dr.
Mr. D. Macgill of Hagers Town, and I am of the impression that it will go to prove, that is, only necessary that a Nuxia should find its way into the bladder, she introduced a stone will be the consequence; and its increase, rate depends entirely on the state of the system. If the person should enjoy uninterrupted health, it will not increase and vice versa.

September 3rd 1827 Mr. D. aged 38, was taken in labour, and in consequence of the case proving to be difficult, Dr. Macgill was called to assist him after a tedious and protracted labour and great suffering the mother delivered of a boy.

September 21st she spent a restless night and complained of considerable pain about the hypogastric region, and had not passed her water since she was delivered. On introducing the catheter a considerable quantity of water was discharged. Ordered a cathartic - clean room, and visiting her in the afternoon the child had operated.
freely, but no water had passed since morning; a flexible gum catheter was introduced, and left to remain in the bladder, that the water might be drawn off, as often as might be necessary.

September 5th, she remained free of fever, and had a good night's rest; the catheter suffered to remain in the bladder; from this time no unpleasant symptoms took place; on the 9th day the catheter was removed, and the bladder had recovered, sufficiently to pass the water per urethra.

About two months from the time of delivery, the Dr. was requested to visit her again, and was informed that she had been labouring for six or eight days, with considerable pain in the lower abdomen. From the symptoms of the case the Doctor was of the opinion that she laboured with a stone in the bladder. He was anxious of sounding, for the purpose of ascertaining the nature of the disease.
The patient would not submit to the operation of
burring, believing that she was labouring under
a prolapsus uteri; an anodyne was administered
to afford temporary relief; and she was informed
that unless she would submit to an examination, that
she would no longer attend her. No more was heard
of the case until the third of May; when
she was again called to see her, and found her
labouring under a severe paroxysm of the pain.
She informed the Dr. that she had consulted other
Doctors, and had taken a great variety of medici-
ines without deriving any benefit from their use.
And so distressing was the pain that she was
willing to submit to any operation that would
afford a prospect of relief, but requested if
possible, that the operation might be performed
without any assistance.

May 12th. The Dr. visited her for the purpose of
sounding her, and perhaps if she showed some
stone present to remove it instantly; not intending
that she should know, that he intended to perform
the operation immediately. On sounding a stone of
considerable size was felt; the sound was then
withdrawn—a strait director introduced, and
the operation was completed with the scalpel.
The forceps was then introduced, and a stone
extracted, two inches in length and one in
width. The patient recovered rapidly and
this day is in perfect health.

In the above case the Nucleus was formed
when she laboured under retention of urine, and
in consequence of the derangement and debility
after delivery. The stone rapidly accumulated
around its nucleus, and altho', it was but eight
months from the commencement, it was much—
larger than several, that I have seen extracted from the bladder after afflicting the patient fifteen or twenty years.

The stone once formed, lithotriptic medicines may be at once laid aside, and if the patient is desirous of having permanent relief, he will be compelled to resort to the operation of lithotomy. For the purpose of extracting the stone from the bladder a great variety of methods have been proposed, but since the adoption of the scalpel little or no improvement has been made. It is true a great variety of gorgets have been invented, and many of the modern surgeons recommend their use, but as I have witnessed the operation with scalpel repeatedly, I am disposed to adopt it, in preference to the gorgets.

It has been suggested by Dr. Jennerius that after the
operative, we should endeavour to heal the wounds by
the first intention, and for this purpose, he recommends
that the wounds should be closed by one or two sutures.
Many years ago Le Rauoe, a celebrated Syphilitist
who operated by cutting on the vesicles, was in the habit of
making the external incision not to correspond with the
internal, for the purpose of having the integuments to
act as a vault. He then plastered up the wounds
with eggs and flour, for the purpose of closing the
wounds in the first intention.

It would appear to me that had the practice of
Le Rauoe succeeded, it would not have been dis
continued, as healing the wounds by the first intention
would greatly add to the comfort of the patients, if
he could succeed in our endeavours to accomplish
it, without endangering their lives.

Dr. Jenner was not mentioned as in his essay, the
attempt made by Dr. Rauwer; and the confident manner in which the 15 years of the practice in his essay published in the Medical Recorder caused Dr. Macgill, to adopt the plan of uniting the edges of the wound by sutures, as I witnessed the operation. I will endeavour to present a brief view of some of them.

The first patient was a boy of aged 5 years, who labour'd under the decease from infancy. The operation was performed with the scalpel; one a stone about the size of a marble, extracted without any difficulty. The lips of the wound was united by the sutures; a gam elastic catheter was passed into the bladder per urethra, and the patient placed in bed.

The evening after the operation, the boy suffered considerable uneasiness—the water passed freely from the catheter.
On restoring him the following morning, found that he had spent a restless night, some considerable time, and ordered a cathartic; on visiting in the evening found no uneasiness to continue and it was thought advisable to remove the catheter. It was removed, and the water passed in the course of a few hours, and the cut, from this time the unpleasant symptoms were removed, and the cut healed about two years from the operation.

The second case was a boy aged 10, the operation was performed and the same plan adopted, but owing to the unpleasant symptoms, we were compelled to remove the catheter. The water passed there, the cut, the patient recovered in the course of 3 weeks.

The 3d case was a man aged 23, the patient was operated upon with the scalpel, and an endeavor...
made to heal the wound by the first intention. It failed as in the previous cases—the catheter was removed.

The 4th case was a man aged 60; the operation was performed and willing to give the proposed method a fair trial, the wound was united by sutures, and a large gum elastic catheter introduced. The evening subsequent to the operation the patient complained of considerable painings and attributed it to the introduction of the catheter. The water passed freely then; the catheter and suppurative entitculations, that the wound would unite by the first intention. The following day the patient laboured under considerable fever and complained of pain about the region of the bladder. In the after-noon the fever had increased, and on examining the wound the external lips had united; but owing to
The great interest it was thought advisable to
separate the lips of the wound; the sutures were reno
ved. And on separating the lips, a considerable
quantity of urine had collected between the exter-
ner incision and the internal. The wound in the
bladder had no appearance of uniting. Death
took place the 8th day from the operation and
was attributed to the infiltration of the urine,
caused by uniting the external incision by sutures,
The ill effects of attempting to unite the wound
by the first intention proved very perceptible in the abov
case. Dr. Morgue has given up the practice
writing by the first intention on
having failed altogether in the above cases. And he
is of the opinion that injurious effects took place
in all the cases in which he had made the operation.
I have witnessed the operation performed by the Dr.
recently since and invariably with success and plea
Now proceed to describe the method adopted by
Shaw — and as it here be necessary for me to mention
the instruments which I have been using, and which I would
prefer in performing the operation. A scalpel; a stiff
iridescient, with a groove on the end of part above for evis.
these are the instruments that may be requisite in the
majority of operations for the stone. Bataurgeon should
be provided with instruments for breaking the stone, should
it be found necessary. She should also be provided with
forceps and needle, such as are useful in placing a ligature
around the pudic arteries, tenaculum spargr and ligature.
and a syringe will also be requisite.

It would be advisable previous to the operation, to put
the patient under a preparative course of treatment. Blood
letting — and the virtues of Calomel &c. &c. continued for a
few or ten days, confining the patient for the same, time to an
abstinent diet, will generally prepare the system for the
operation.

The acetone should be emitted by administering an enema.  

The urine should be retained in the bladder, if it can be done conveniently.  An opiate should be administered; after which the staff should be introduced, and the patient placed on a table and bound in the usual method.

A folded blanket placed under the hips: the operator to be seated, as to have his bust on a line with the perineum.  An assistant will then hold a staff with his right hand inclining the handle to the right ground, the concavity to be pressed against the left perineum; the distal to be held up by the assistant's left hand.  

The operator is then to notice well the names of the muscles: stretch the perineum towards the right side with his left hand, and with the common scalpel, the size to be in proportion; to the age of the patient, he is to make...
an incisive, three or three and a half inches long. The skin
and muscles, this cut is to extend obliquely towards the left
side, and about three fourths of an inch from the osteichy
running parallel with the name of the bone.

The surgeon is now to feel for the groove of the staff
with his left fore finger, and cut immediately there. The
muscles towards it making the wound on the same direc
tion as the first incisive. He will now enter the groove
of the staff, and the point of the scalpel is to be placed
in it, with the back of the scalpel resting towards the
ground, holding the scalpel at a considerable angle
with the staff; it is to be thrust along the groove until
the prostate is divided. The fore finger of the left hand
is to be carried along with the scalpel until a
division of the prostate has taken place. The surgeon
join now withdraw the scalpel and the assistant will
remove the stuff, the surgeon left before finger remains
in the wound. He may now take the forceps and pop
them in the bladder; the left fore finger, taking the place
of a director, immediately on the stone being removed
the bladder should be washed out withturkey water
or remove any particles that might remain: A gum
elastic catheter should now be introduced into the
wound — dry lint should then be applied to the
cut, and the patient put to bed, a basin should
be placed to receive the urine as it passes from the
catheter: the catheter to be placed in a tinned
separation has become completely established
The after treatments, to be adopted according
to circumstances
An Essay on the 
History of Medicine. 

William H. Johnson.

Campbell on Grammar.

University of Maryland.

March 1893.
An Essay
on the
History of Medicine
by
William H. Johnson
a
Candidate for Graduation
in the
University of Maryland
Course 1829-30
To attempt to trace at length the probable origin of medicine would be idle speculation, or to determine whether it be the result of random experiment, of imitating the instinct of Bucis, or of Divine Inspiration.

Disease is the lot of Humanity, and remedies, or attempts to relieve must be corral with disordered functions.

The means of procuring relief was to expose the patients in the markets or streets & highways and thereby to obtain if possible the advantages of greater sagacity and more extensive experience. All who passed were compelled to prepare a prescription for the unfortunate sufferer and thus when sagacity and opportunity were combined with memory, they constituted the physician of rude ages as they too often constitute them in the present time.

Priests as possessing more leisure and more frequent opportunities of observation, were probably the first practitioners of medicine and accordingly, the most successful physicians were soon Deified. Superstition gradually mixed in the scene, and dreams and incantations soon dimmed the glimmering light which experience had suggested. Yet however superstition and design may have corrupted the fountains, the stream appears to have been preserved with tolerable purity by means of the temples, for these were the receptacles of the earliest records, and patients recorded histories of their diseases.

From the Temple of Esculapius, Hippocrates is said to have drawn some of his best observations.

To the Egyptians, Medicine as well as every other science is
qually indebted. But their real knowledge in medicine is not easily ascertained, when Griepp Alpinus wrote, improvements in the science had already been made.

Blumenbach tells us that the process of embalming was hastily and rudely conducted, and we cannot attribute any scientific knowledge of medicine to those who confined the management of each disorder to a single family, a single disease to one practitioner and limited by law the use of medicine to a definite period of the disease. To them, we are indebted for many valuable prescriptions of the present time, and certain it is that they excelled in prognostics which must have been the result of careful observation. Galen, while he highly commends this talent, attributes it to Astrology. Their remedies were chiefly divinatory. The events of the Trojan war which called for the interposition of art, were chiefly if not entirely external injuries and there is no reason for supposing from the language of Homer that internal remedies were at any time used. Nepenthe was perhaps the only instance. If the Temple of Philostratus ever at a subsequent period crowded with notaries who sought his aid in Intermittent, Diopetric Consumptions, we must rather attribute the removal of the complaints to the arts of the Priest or the credulity of the notaries than to the interference of the learned Hesic, who is not represented as having possessed any medical powers.

Escurapius who accompanied the Argonauts is not mentioned in the Iliad but his fame was preserved in his temples of the Rhodian and Italian schools, established by the descendants of priests of Escurapius. We have few remains. Galen gives some hints of the latter. The fame of these schools and of
the Philosopher was soon eclipsed by Hippocrates who seems to be the first to whom the appellation of Physician in its modern acceptation is due.

The first separated it from Philosophy, gave to the term of a distinct science, and personally observed the progress of diseases and the effects of remedies.

Of Hippocrates it is difficult to speak with impartiality in a manner that will satisfy his warm admirers, or those who reject every thing that is not of modern era.

If we look at him as a Physician, when medicine had scarcely escaped from the trammels of superstition, or the refinements of Philosophy, our admiration must rise almost to enthusiasm for we perceive a display of sound judgment, accurate reasoning, and accuracy of observation far superior to the state of science and the time in which he lived. But to study and admire his works at the present time is very different; science has opened newer and more extensive views. Diseases are distinguished with greater accuracy, and remedies being more numerous may be better adapted to the consequences.

As however he fills so vast a space in the medical science I may be permitted here to take some further notice of him.

Hippocrates was born in the Island of Cos 460 years before Christ. He is believed to be a lineal descendant of Esculapius the family whom direction the Curn school attained its high degree of eminence and by his mothers side, he is said to have descended from Hercules.

Born with these advantages and stimulated by the fame of his ancestors, he devoted himself to the study of the healing art. Acquainted with the Empiricism which had been practiced

by his ancestors he determined to judge for himself and to adopt
those principles only which seemed to be founded in sound
reason. He was thus enabled to throw light on the deductions
of experience, and to bring medicine into the true path of observa-
tion under the guidance of reason, since the Physicians of the
Aegaeic sect always acknowledged him as their leader.
The events of his life are involved in obscurity and fable, and
to distinguish his real works is therefore a difficult task.
Yet even the undisputed works of Hippocrates should be received
with some hesitation; the criteria by which they are decided
are by no means infallible and they show rather the state of med-
icine in the earliest era, than what may be styled the system
of an individual. They are objects of curiosity rather than of use.
Yet the writings of Hippocrates merit attention.
When the title of Doctor is assumed merely as a claim to receive
the fee of a Physician, it is of little importance whether he
can read or not. The world is contented to take his talents on
trust. But the man who claims the rank of a regular, well
instructed Physician should not be ignorant of the language of
Hippocrates, or the state of Physick at the earliest period of
medical observations. He will derive no little satisfaction from
the terseness of the Hippocratic style, from the candid relation
of facts whether favourable or otherwise, and from the firm
undeviating integrity which seems to have regulated the conduct
of this Father of Medicine. But various are the authors who
have treated of Hippocrates and his system, without knowing
that in the same volume, works unworthy of any author of credit
were confounded with his name.
the time of Hippocrates, that a knowledge of nature is the first
principle in medicine; has been quoted with great zeal to prove
that he who saw this position in so strong a light must
have been acquainted with the structure and functions of
the human body. But his Anatomical knowledge must have
been very limited as the dissection of human bodies was
prohibited by law. And in his work on the bones, he describes the
spine as consisting of twenty vertebrae only.
The Hippocratic Pathology might be offered in a neat
compacted system over the work on that subject certainly
written by the Father of Medicine. It is however generally
and deservedly removed to a later era.

If however, his work be examined, it appears that he attempted
to fix the reason, and examine their different influences
The prevailing winds and the situations of Marsh's Mountain
he describes with great precision, and pays peculiar attention
to the age, mode of life, constitution &c. of his patients.
The histories or daily progress of diseases he has described
with great accuracy. nor are his remarks, though not strictly
applicable in our climate, and in constitutions so totally
suffering by a very opposite mode of life, wholly useless
at present.

Observation seems to have suggested, what have been styled
critical days. Nor though the hints at a supposed harmony
of numbers is there any real evidence to suppose that
the doctrine was suggested by it.

His observations on the pulse are few and inconsiderable on
the excitations from the lungs, stomach, or bowels, peculiarly
distinct and pointed; and on the appearance of the features and state of the body, full and discriminated. But with all these aids he considered the prognosis of acute diseases as uncertain. He diligently investigated the causes of diseases, but especially their symptoms which enabled him to distinguish them from each other.

He acquired a high reputation among his countrymen and his opinions have been respected as oracles not only in medicine but in courts of law. He has shared with Plato the title of Divine. Statutes and Temples have been erected to his memory, and his altars covered with incense like those of Eucleides himself, and after attaining the age of nearly one hundred years this great father of medicine died.

Greece now became subservient to the superior genius of Rome, and we must there look for the progressive steps of improvement in medicine, Rome, formed by the rude tribes of ferocious bands, wanted for many ages little more than those Chirurgical aids which their mode of life rendered indispensable. Though epidemic fevers were occasionally violent and fatal produced by the Pontine Marshes which were at no great distance from the capital of the world, yet for nearly six hundred years they were said to be without medical aid and their only resources to have apparently been blind empiricism, superstition, charms, or religious ceremonies. Temples seem to have been erected to Jupic and thus their most distinctive enemy raised to the rank of a god. Some of the subordinate deities of the same kind were introduced in various parts of the city, and no less than three goddesses
were professedly by offerings to confine Sylvanus, who was supposed to be inimical to women in childhood.

Pliny, from some motive which I am unable to define, fixed the period of six hundred years during which no Physicians were to be found in Rome, but it must be obvious that this could not be strictly true, for some resources either ridiculous or superstitious must have been sought for when disease prevailed.

Many works have been written to prove that the Physicians of Rome were Slaves, Libertines, or Foreigners, and the opponents of this opinion were equally voluminous. I am induced to believe that many of the Practitioners were of the former description, but certain it is that many of them were of a superior character. Archagathus was received with great favour and a house was purchased for him. Not on the decline of his credit was he deprived of it; she was also raised to the rank of a Roman Citizen, and their Laws declared that if any Physician neglects a slave after any operation, he shall be pronounced guilty of a crime.

By the same Law an action shall lie against a Physician who by the unskilful use of the knife or of medicine shall kill a slave.

These regulations must relate to women for the Aquilian Law is confessedly anterior to the age of the Caesars, for all Physicians were by Julius Caesar raised to the rank of Roman citizens.

Also is said to have been a Roman and though he frequently speaks of his own observations, he certainly was not
...
A regular practitioner of medicine, for whom Pliny speaks of
the Physicians of Rome the name of Celsus is never mentioned.
In his works he chiefly follow Hippocrates, particularly in his
histories of disease and his prognostications except in relation to
critical days.

I will now advert to that revolution which for ages gave
a stability to the science of medicine and fixed an oracle that
for more than thirteen hundred years dictated to the world, and
whose decisions were listened to with the most implicit satisfaction.
I allude to Claudius Galenus who was born in the reign of
Senecio in the second century of the Christian Era.

He studied at Alexandria but practiced chiefly at Rome, and
was the Physician of the great Marcus Aurelius one of the few Emperors
who added lustre to the Purple.

Galen was distinguished in his earliest years for a lively fancy and
uncommon ingenuity.

He attained all the learning of that Era, and was soon disgusted
with the prevailing systems of medicine.

He professed to select from each what was most valuable but has
almost entirely confined himself to commenting on and illustrating
the works of Hippocrates which he says succeeding Physicians
either misunderstood or misinterpreted.

Galen wrote very profusely on every part of medicine but he
added only dust and ornament to the system of Hippocrates.
Indeed minute distinctions and sound reasoning are all for
which the world is indebted to him. The doctrine of concordion
a fatal idea was established in his school.

The splendour of Galens talents and fame so completely dazzled
his contemporaries and successors that we afterwards find but few who dared to think beyond his circle.
I will now pass on to the seventeenth century leaving behind unnoticed all the intermediate cultivators of the science as they were only the followers and illustrators of Hippocrates and Galen. The conclusion of this century was distinguished by some of the brightest luminaries that have ever adorned our science, amongst whom Sydenham, Morton, and Baglivi held an elevated rank. Boyle had perhaps may be said to have stood foremost in the ranks of this era. From the Chemists and the Mathematicians he drew his theory, but his practice was founded on the sound principles of the Coven Sage and his followers.

The fatal doctrine of concoction took its ground and was supported with great zeal. Thus fever was not to be checked but rather encouraged, destructive delusion. Millions have fallen victims to this fancy.

While Boyle held the reins of Empire and ruled with a sway almost as absolute as that of Salen two rivals arose who overturned his apparently well-established dominion. Hoffman and Stahl were rival professors at Heidelberg without ceremony and without at least open opposition. Hoffman was a voluminous writer but not the founder of any sect for his writings are said to be inconsistent and his arguments directed to no definite system. He wandered from the mechanical to the Chemical doctrines but in the midst of these directed the reader's attention to the exertion of the vital powers in changing the direction and the balance of the circulation.

Stahl with scarcely less industry, but with acuteness of talents
eminently superior, aimed at changing the whole of the science.

He acknowledged with Vanheulmont a ruling power guarding the constitution against disease and repairing every defect that might occur, but with this superintendence he considered the human system as a living and an irritable machine susceptible of various and irregular motions, and consequently of topical conceptions. Whatever becomes of this idea it is evident that the germ of this new doctrine gradually expanded.

Even Boerhaave, in his later years, did not reject the consideration of a nervous fluid though consistent with his homoeopathic pathology he considered it as inactive. And Glauber, his successor, treats at some length on the diseases of the vital fluid.

Hoehler, though chiefly of the mechanical sect, and who is entitled to our gratitude for his industry rather than his genius assisted this new evolution by his experiments on irritability. And Dr. Cullen at last constructed on this ground a system highly ingenious though like most first efforts, too refined and sometimes incorrect, on the same foundation Dr. Brown has still further refined, but while the Boerhaavians made the human body wholly material, he considers it as entirely spiritual, created only by heat motion and other stimuli.

I will not comment on Physicians of the present era. The advancing condition of our science speaks a language that my pen would fail to portray.

I may be permitted in conclusion to make some remarks.
on the talents and acquirements necessary to constitute a physician.

It would appear superfluous to say that a Physician should at least be acquainted with the dead languages and not hastily see pretenders to that character without even a knowledge of their own.

If, as has been supposed, the practice of medicine requires the active exertion of the intellectual powers with their full energy, it will at once be obvious that every method by which the Physicians will or early contracted must be injurious.

For this reason the spend the first period of his life in an Apothecaries' shop has appeared a plan of the worst tendency, for this is the time in which he must endeavour to attain an intimate acquaintance with the Classics, a competent knowledge of Mathematics, and of Natural Philosophy.

Man, the most glorious work of the Creator, within our limited observation is not indeed regulated by the laws of matter and motion but each must be often taken into our views, in reflecting on the deviations from health and the means for restoring it. And so intimately is every part of nature connected that we cannot draw the line where the Vital powers begin and those of matter and motion end.

Mathematics are highly necessary to enable the student to follow the mechanical Philosopher and
to understand the mechanical Physician, for it is highly disgraceful in the modern Physician not to be acquainted with the principles of every sect or unable to comprehend their mode of reasoning; without mathematics Baller and Van Swieten will be often unintelligible. The ability of mathematics is not confined however to their aids in pursuing other objects. They accustom the mind to close abstract investigation; it gives a habit of connected and accurate reasoning.

Natural Philosophy is highly necessary independent of its connection with matter and motion. We are advancing rapidly into those branches where, as in the human body, we see effects without being able to comprehend causes. I allude to the sciences of Electricity & Salvanism for I believe that the time is fast approaching, that by the aid of these we shall be enabled materially to illustrate the functions of the human body.

Chemistry is now acknowledged to be an essential part of the Physician's education, nor should any science which is ornamental in a gentleman be omitted. Geography for instance may appear far from a necessary branch of a Physician's education but it would be disgraceful to speak of Iapetian as a production of Russia or the Cimbrorum of the Arctic Circle. All these and, or should be preparatory sciences, for Medicine itself is a study which will
fill all the time usually allowed for its attainment; when then can this varied knowledge be acquired? Not behind the counter, not by dispensing the prescriptions of others, nor by staving at diseases without information or without principles. In this way the student either acquires no knowledge or crude imperfect ideas, which he can scarcely ever correct. This kind of education also narrows the mind in another point of view. We look with some partiality to our earliest instructor, our first ideas stick to us with peculiar force, so that it is of consequence where they are acquired.

It is important that he who is designated for a physician should be educated from his earliest years with a view to his future profession, if the best parts of his life have been directed to other pursuits he will seldom acquire that extent of information and readiness of application which the practice of his profession requires. It is not however enough to possess knowledge but the mind should be ready and active in its application; it is often necessary to adopt at once a plan and pursue it with active decision. It is necessary to weigh contending difficulties and at once to seize the path where the greatest or the least important appear or where the inconveniences are counterbalanced by the advantages. This rapidity of decision, the result of great and extensive knowledge as well as readiness of resource is often the offspring of ignorance.
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No difficulty can be experienced by those who are unable to anticipate danger. Physicians are called on in general to act with this decision, and to hesitate is usually accounted a mark of ignorance. A man must have merited the confidence of the world before he can acquire time for consideration and his reputation be firmly established before he can own himself as a loss.

The mind of the physician should in the most arduous and difficult circumstances be unruffled. Doubt and hesitation should never be seen in his countenance. In the midst of uncertainty he should be calm, and in the most adverse events he should never appear without his resources nor until the case be wholly desperate should he suffer those around him to despair.

Thomas Johnson
वहाँ भी होना चाहिए कि यह दम दिन के लिए बिगड़ना हो सकता है। जब भी इसके कारण बाहरियों की हालत बिगड़ती है तो उसका उपयोग करना अधिक जरुरी हो सकता है। बाहरियों की हालत मंत्रा में बिगड़ती है तो हमें उसे सही तरीके से उपलब्ध रखना चाहिए।
An Essay on Trachitis

By

Denis Delany

1830
To

Doctor James B. Stansbury

This essay

is

Respectfully inscribed

as a

Slender tribute

of

Gratitude

and

Friendship
In compliance with the mandate of the university, in which I have had both the honour and advantage of first receiving those principles of medical instruction, that are the groundwork of my future superstructure in medical and surgical sciences, I offer the following remarks upon an affection, which from its frequency and fatality, deserves the particular regard and consideration of every physician. Not, that I can suppose, nor indeed, can it be expected, from my limited observation and experience, to throw any additional light either upon its pathology, or treatment. All that I propose, is only a review of its pathology with its symptoms and cure.

Trachitis or Croup is a disease on which there is a difference of opinion, prevailing among medical
writers, both upon its pathology and treatment. Cattel describes this affection as Catarchus
suppuration, as a supposes it to be a distemper, in which, the trachea, larynx, and especially the
epiglottis, are primarily affected, and believe it to be consequent upon irritation, which arises
from an acrimony or saltness of the lymphs. We
find it attested by other medical authors, under
the appellations of angina sindula, Cynanche, Cyn-
angia, and by our illustrious countryman
Dr. Rush Cynanche Trachealy. We shall however
for its simplicity, adopt the term used by Dr
Ulatck.

Trachitis or croup, consists in an inflamed
state of the mucous membrane lining the trachea, larynx,
and in the cersest trachea through the
whole length of the wound. It is known by fever, a continuous inspiration, and a difficult respiration, which is greatly aggravated in paroxysms. This increased difficulty in the respiration, taking place in paroxysms, led many to suppose that there existed two conditions of this disease, an inflammatory, and apoplectic. Indeed, however, according to Thacker, his practical ability can be derived from this distinction; as according to him, these two states are combined in a certain degree, and haphazard those mean, which are acknowledged the most effectual, in counteracting inflammation, are such remedies as hopping powerful anti-apoplectic virtues. He is from our own obser-

vation induced to believe, that it is impro-

ible for the muscles of the larynx, even to close
The larynx glottides, and when ever this effect is produced, it is the result of violent inflammatory action. It affects children between the age of three, and ten years; but those under six months are not so liable to it, as they are after that period, to the age of eight or ten years. Adults are not entirely exempt from it, as is remarked by Professor Potter, who observed, he had seen upwards of twenty cases in the same number of years.

Eltmüller records the case of a young Rhäpician, of a strong and tall body, who had only fallen ill of this disease, in twenty four hours died; and makes mention of his having been four more, two of which only recovered; also does Dr. Rush bear testimony of such cases. In considering the symptoms of this disease, we
shall find it frequently commences without any
premonitory symptoms; and, indeed, in so short a
time, as not in the slightest degree to attract our
attention. The description of an attack of this
kind is so faithfully delineated by Dr. Millar,
that we shall quote his words, "Children (say he)
at play, were sometimes seized with it, but it
generally come on at night. A child who went
to bed in perfect health, woke in an hour or two
afterwards in a fright, with his face much
flushed, or sometimes of a livid colour, incapable
of describing what he felt; breathing with much
labour and with a convulsive motion in the
belly, the returns of exhalations, and inspiration,
quickly succeeding each other. In that scene
their conscious manner, which is often observed.
in an hysterical paroxysm. The child, terror
sometimes augmented by the delight, the child to the
house and if he was not speedily relieved, by
coughing, belching, vomiting, or lunging, the
suffocation increased, and he died in the par
oxysm." But it is usually preceded by a
fever, moist cough, which is succeeded in a
few days by a peculiar chilliness, and ting
ning of the nose, as if it came through a
broken tube. In some cases, these latter symp
toms show themselves from the first, coming
in towards evening, and perhaps during the
night, the inspirations following the cough
are long, accompanied with the peculiar char
acteristic crowning noise. Dr. Rush say the
cough resembles the barking of a young doa.
and this symptom, in its universally present, that he always relied on it, as a pathognomonic sign of the disease. Fever comes on at first slight; afterwards, becoming more severe; the pulse frequent and a hard; with thirsty, dry skin, &c. When the attack has not been very severe, the child retains its appetite, and exhibits very few signs of disease, except when the nasopharynx is inflamed, then there is a slight hoarseness, which almost invariably attends it accompanied with a drowsiness, and the eyes watery and inflamed.

If something be not done to check the progress of the disease in the commencement, the symptoms become greatly aggravated; respiration become more laborious; the cough more troublesome; the pulse more frequent.
and exsanguination more scanty, and difficult, until the patient dies of gradual or sud-
ner suffocation. The duration of the disease
is very various, depending in a great measure
on the violence of the attack. In some cases
it is so violent as to destroy life in twelve hours,
in other cases in forty eight, or seventy two hours.

If the patient passes the first stage
without having suffered much in consequence,
the prognosis is generally favourable, although
the cure is oftentimes tedious, and in some cases
attended with the exsanguination of a membranous
matter, evidently the result of high inflam-
matory action, under which the sepulchral
labours, and a formation of the coagulable lymph
of the blood, seems organized.
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Post mortem examinations have discovered this substance of the Vaccine of the trachea, and of a membranous appearance, not confined in all cases, to the trachea alone, but extending to the ramifications of the bronches, as in the case mentioned by Professor Retzius in a note to Gregory's Practice of Physic. "The same sort of formation is observed by Dr. Gouta, as taking place in the downwards tubularis of his maxillary, in which, as in bronchitis there is an inflammatory affection of the related organ. It sometimes occasions death by blocking off the air passages, when the patient is much weakened and has lost the strength necessary to dislodge and remove it. Its existence is often indicated by the manner in which the child breathing, throwing its head back so as to
put the trachea on the stretch. Group follows
loose throat. Measles, Small Pox, Scarletina,
and Cynanche Maligna.

The fact of its supervening upon these
affections, gave rise to the distinction of an
Idiopathic and Symptomatous species. But we
wish here only to notice it exclusively as a Primary
and local disease of the Mucous membrane of the
trachea, bronchial, and surface of the lungs.

However, it is of the utmost importance in
a practical point of view, to distinguish it from
other affections of the air passages.

The most usual exciting causes are
cold, and moisture; hence its appearance in
autumn, winter, and Spring. It may arise
incidentally by inflammation passing from the
lungs, primarily inflamed, to the Mucous Mem-
brane of the bronchial, and along that to the

...
trachea. Translated gout & rhumatism may produce it. It differs from an Influenza or a Measles, when the patient's have been exposed to cold; and in these cases the inflammation is very apt to attack the lungs, and frequently proves fatal. Hence the necessity of guarding against exposure to cold, while laboring under these diseases.

Patients who have had it once are very liable to have a return of it, more particularly, when from exposure to cold, they contract a cataract. It is not contagious in the opinion of Professor Potter. Dr. Gregory however, as well as Dr. Cheyne, incline to the opinion, that it is as in some cases which are very violent, and particularly those attended with fevers.

The treatment of this disease was very ill understood by the older practitioners. We find the ancients highly recommending blood lettings, purgation, emetics, and investigations.
Sttmller of whom we have formerly spoken,
strongly recommends blood-letting both general and
local, with emetics, and sharp elyptics, and under
certain circumstances he gave opium.

The medical writings of Cheyne, Rush, Godd,
Armstrong, Gregory, and others, have given many
satisfactory views of its treatment.

Gregory had the divided the treatment into
two kinds, butted to the mumps blasa into which
he had divided the disease, viz. the first consisting
of that stage which is characterized by acute
inflammatory actions; the second, being distin-
guished by the formation of that maternal
membrane before spoken of. During the first,
the inflammatory stage, chief reliance is to be
placed on general and local blood-letting
and occasionally purgatives. A great deal
of discussion has taken place as to the quanti-
ty of blood necessary to be drawn in this disease.
come advance it to be taken largely from the regular
in mind the bulle flags; others condemn this
side of practice, and depend on local bleeding, with
bleed, with locale of healing medicines, the ade
in circulation, and that overcome inflammatory

This is even among of opinion prevailing
among medical practitioners, among the quantity
and manner of abstracting blood in this disease
without, more from the various grades in which
they found inflammatory action.

There can be no question when the absolu-
tute necessity of taking blood, and that to in
a quick time, and as communally, as possible
vulgar and intractable is the disease in
some cases; but the judicious physician should
be clear in mind the age, constitution, and
of its evidence. That very young children
in bear a burden, and great loss of blood in
very disease, we are very much disposed to doubt.
Of the knowledge of this fact, should not intimidate us in a quick application of this potent remedy in those who are fit subjects for its employment. Dr. Rush, who was perhaps as great an advocate as any man in his time, or since, for bloody bloodletting, in inflammatory diseases, is disposed to believe, that there does sometimes exist a chalybotic condition, counterfeiting an acute inflammation, which yielded to antiphlogistic remedies, particularly the warm bath. We well recollect in the course of our reading some observations made by Dr. Rush of Philadelphia, where he states he saw this affection, which would not yield antiphlogistic means, but was completely cured by antiphlogistics.

We wish that to be understood in the foregoing remarks, that we advocate a chalybotic severity of this disease, but we can very easily imagine how the muscles may be made to perform,
that modulate action? If we reflect on the vast
irrelevance of the membrane lining, as well as the
veils surrounding the Ears, and, by the enlargement
of the Capillary vessels, we can easily imagine
by this enlargement of the tympanum globe, it
may be closed.

Our opinion founded upon our read-
ing and observation, inclines me to adopt early
a Copious bleeding, aided by large and
cheated doses of Calomel, with Tartarized Anti-
mony. It is almost incredible to what extent
may carry this remedy, in the subduction of
the highly inflammatory form of this disease.
I have been 10 grs of Calomel, with one of
Tartarized Antimony, to a child two years old,
-t intervals, of two hours, for 20 hours, with in-
tible emesis and Cathartics, with a complete ter-
mination of the disease. It was the principal
method of one Countryman Dr. Rush. He says,
ignores large dose of Calomel as soon as the
define discovered itself, and smaller doses should
be given every day, while any of its symptoms
continue. We might be asked in what manner
it subsisted, Colonel act in this disease:
how the Modus operandi of medicine, we can
not but acknowledge much imperfections and
indeed the modes of operating of many medi-
cine, are merely conjectural; but according
to Dr. Rush, it acts by increasing the secre-
tion of moisture in the fauces, esophagus, stomach,
and bowels, and thereby depressing the secre-
tion in the trachea; he continues, that the anal-
ogues of the secretions, and excrections, in other
parts of the body, whether promoted by nature
or art, seem to favour the conjecture.

We should be governed in the administration
of this, as of all other medicine, by their effects
produced on the patient. On this, then, with
free hand, every reliance may be placed.

To the known operation of Farfas Emile
To

Maxwell A. Powell, M.D.
Professor of Institutes

in the

University of Maryland

This

Inaugural Dissertation

is

 Respectfully dedicated

by

His Most Obedient

and Humble Servant

J. P. Marland

of Savannah, Georgia

Baltimore 16th March 1830.
Great indulgence and divine hydrope

A learned physician has said—men of influence have the choice of four alternatives: to be sober, temperate, to take a great deal of exercise, or of physic; or to be idle.

To illustrate these truths, would be superfluous. They cannot be denied, but by those who do not wish to understand them.

First, two said the Lord, and light appeared in all its splendor; but it cannot enlighten the blind. To describe all the decease, that spring from the omission of these rules, is not
my intention, as an enumeration of them, would be more than the limits of this essay will admit, but a description of them, would require volumes. it would be a labored task, to explain such diseases as do not originate in right temperate living and idleness, than to point out those which owe them their commencement, their progress, and their almost fatal issue.

Among them, I have chosen...
may escape generally, a most fatal disease.

Ascites

This disease manifests itself by an elevation of the abdomen, with evident fluctuation; it commences generally by a swelling of the inferior extremities, pale countenance, thirst, low fever, dryness, dry cough, Carpalgia, Verticulatus, etc. Constipation. Urine in small quantity sometimes limpid, at other thick and depurating, a brick-like sediment. The leanest of the superior and the Adenous plate of the inferior extremities, and of the scrotum and penis.
and the unequivocal sign of the disease.

Ascites can be complicated with other diseases, such as Syphilis, Pregnancy, Stool, and Pneumothorax.

So it arrived that now I am quite useful in these matters de contrabanda, for Ascites, but they can easily be distinguished beside the fluctuation which distinguishes the two situations. We can also judge by the countenance which bears the impression of the disease, and which is perfectly natural in Pregnancy. We can also feel the motion of the fluid.

We must examine the configuration of the Abdomen, which is excavated.
Scaly in Pregnancy, and bulged out in Ascites. We must also enquire whether she is regular in her Climacteric by ascertaining these. We will evade the impudence which would be otherwise practised upon us.

It is difficult to distinguish true Ascites from encysted Dropsy. Notwithstanding what has been said by authors on this subject, for in both encysted and diffused abdominal Dropsy, we have fluctuation, it is true, that it is sometimes not very sensible to the touch, because the liquor is at times thick or enclored in small Cysts, but when the Cyste occupies the inferior part...
of the abdomen, the fluctuation is equally manifest as in true ascites.

The liquid drawn by the operation of Paracenthesis from a cyst, is most generally muddy, foetid, bloody, or serulent, which is very rare in true ascites.

Encysted Dropsy is longer subsisting and the patients retain their colour, their emotions, and their appetite; and the indifferent extremities engorge themselves much faster, and the patients appear to suffer no other inconvenience than the weight and size of the abdomen.

It has been reported that as
high. On 12th. of July, was found in the abdomen of an individual labouring under this disease.

Causes: Intemperance, Cachexia, Scrobutus, Gout, acute Hemorrhage, Lecythymatism, Asthenia, intermittent Fever, supervention of cutaneous Eruptions, dying of old ulcers. Astulas, and such causes as impede the circulation through the portal system of vessels, among which are visceral induration, particularly of the liver, and spleen, which are the most common.

But the most common general cause of Acitis is cold, either generally or locally applied.
Proximate Causes. A morbid action of the exalents of the Peritoneum, attended with capillary congestion and diminished absorption.

Treatment. When the heart sympathizes with the primary local irritation, or with the morbid action of the capillaries, from which the effusion occurs, Blood letting is an important remedy. It is indicated in all cases in which there is tension, and quickening of the pulse.

When the disease results from the effect of cold, its character is always inflammatory, the Blood drawn usually exhibits the Buffy Coat. Diuretics are rather palliative.
That the curatives are the effused fluid, without correcting the morbid action, on which the curative depends. The most useful curatives are: Strychni, Digitalis, Cantharides, Acetate, Nitrate, and Tartrate of Potash, Calomelium, and Ipecacuanha.

Cathartics are valuable remedies in fevers, not only to evacuate the intestinal canal, but for their stimulant action, on the excretory reflexes. They are supposed to diminish the fluids with regard to the whole body, and by a similar operation, increase absorption, so that when the action of one is increased, that of the other is augmented, the increase...
exhalation of some fluid in the
bowels, which cathartics occasion
cause, an increased absorption, and
then, that Division are sometimes cured.

It is evident that those cathartics
which stimulate the exhalant fluid,
are best calculated to fulfil this
indication, since the salts are the
most serviceable.

Mercury is a remedy of valueless
power in Hydroptic disease, given in
combination with some of the Diuretics,
particularly Squills, or Digitalis, it should
be continued until the mouth is
slightly toasted, particularly and in
when the Liver is concerned.

Diaphoretics are indicated when
The Disease is the consequence of suppressed perspiration from cold, in such cases Antimonials, Nitric, and Colonial, act beneficially.

Jodine has been recommended by Dr. Thompson, in ovarian Dropsy and other glandular diseases, and without doubt it would be equally as beneficial in Ascites, depending on obstruction of the Liver or Spleen, or accounts of its deposit or quantity.

Blisters or Retesacents on the Abdomen, have been highly recommended and no doubt from the stimulant operation which they exert on the system may act beneficially.

If the above remedies fail, we
Must have recourse to the operation of Paracentesis, abdomen. We ought never to draw all the fluid off, at once, as it prostrates the patient too much.

If after the operation the abdomen refills in thirteen or fourteen days, we have very little hope for the recovery of our patient and we are forced to reiterate the operation, to prolong the life of the sufferer.

But if we succeed in evacuating the fluids, we must administer tonic remedies, such as Bark and Wine.

His aliment should be dry.
and nourishing; and he should take as much exercise, as his strength will admit. He should wear flannel next to the skin, and make daily use of friction with the flesh brush.

By careful management we may perhaps succeed in preserving our patients.

With this, Sir, I submit to your liberal examination.
A Dissertation

on

Yellow Fever

By Charles M. Hullod

Virginia

1830.
Sir,

Allow me the pleasure to dedicate these few lines to yourself, not from any pre-existing respect for your rank, but as a sincere testimony of my esteem for you as a friend, and at the same time acknowledgment of my obligations for the many invaluable lessons which I have received from you both in private and public capacity upon medical and other subjects, for which gratitude the only offering I can make seems to me, I think the time is not far distant, when Generosity must meet its reward, and when a free and enlightened republic shall hail you as the Author of Reason of America.

I am with due respect,

[Signature]
Not with standing the time that has been spent, and the talents that have been employed in the investigation of this subject, many points of vast importance seem yet unsettled and are still the subjects of investigation. Opinions have lowered around us and the gnomes of a Rush, a Potter, a Hepburn, a Chapman, &c. have been called forth in the common course of humanity. Papers have been written, and Essays given to the public, differing essentially in this, agreeing or touching every point. What that has been laid down by our Father, to guide the youthful physician on with certainty of success to the scene of battle, with this mortal enemy of mankind. To whose writings shall we look for information. Where, whether to the one of these great men we turn one eye the dread full fact of discordance stands us fully in the face, and we turn away in despair & confusion. Then all that remains for us, is to weigh and examine, the principal facts, arguments contained in the writings of these great men, hold we to that which stands the test of reason; apply it to practice judge of its real value, throw to the wind these sophistries which are nothing but the wanderings of imagination, the offspring of some favourite but false & baseless theory. Both youth and experience forbid that light should fall from my firm upon this dark & obscure question, but as the Laws of this University require a declaration upon some medical subject, before any disciple shall receive its degree, I feel myself bound to the Authority and proceed to the task. There is a disease which occasionally makes its appearance in our City, & Towns, destroying our Citizens like a spreading burn and devastation wherever it reigns. Like the Virgin chills by the pouring wind, it lies quietly at one feet, until called from its icy bed, by the congenial rays of a summer sun.
null
it was incensed with any surrounding object, breathing in each surrounding breath from near disease to death. Argued like always upon the water lines and over the stranger and the town, whispering by, utters in a breath which convinces him to the intemperate time.

It is known commonly by the name of "YELLOW FEVER." I consider this subject worthy of consideration from the fact, that amongst authors of our own Country men who have had ample opportunities of investigating this subject, we see them disputing, with much the air about upon the most important points of the disease.

We first proceed to enquire into. Origins, contagion, contraction, cause, and seat of the disease, and take notice of a few of the most prominent symptoms in justification of the use of the two remedies which we consider to be of the greatest importance in the correct treatment of the disease. For information on this subject we are not compelled to look to foreign writers, we have not paid over the borders surface of the Atlantic to beg knowledge of the West India Physicians; come here, go to Philadelphia, and investigate the writings of Rush, Totten, Chapmann, and all that has been taught of importance upon this subject we shall be able to learn. Read what Dr. Rush the first of our Countrymen who wrote upon this subject, with regard to himself and honour to his Country and profession, says of this disease. His ideas and observations, are worthy the man who gave them birth; and we now come to investigate the Origins. Disputes and contentions have arisen amongst the faculty concerning the time and place of the first appearance of this disease, but we consider this a point of minor importance, and scarcely worth the consideration of our time in
its investigation. Are we able to point out the very spot
upon which this disease first made its appearance, could the
hope it first prorogued upon the world be clearly demonstrated,
what would it suggest us, should we be the better enabled to
combat it, when it breaks out amongst us, we think everyone
would answer in the negative. Medical Philosophers are
decided upon this point, one party loudly declare it to be a
case of comparatively moderate degree, whilst a notice and an op-
posite set think it had excited some immense, and has
been insidious from one place to another. We think it be-
probably is one of the oldest diseases upon the pages of history.
I need not tell you of the manifest changes in Climate here
amongst, they are manifest to the eye of the most careless ob-
servor. But as all the materials for the generation of this
disease have existed ever since the civilization of man, and as
Evidence have existed according to the accounts of History
and in Cities of the east, resembling in many important par-
ticulars this disease, and in this Country as well as Europe
where by the providence of nature a the neglect and loginess of
the People are thrown together certain materials which are act-
ed on by other power we see the disease under consideration
arise in all it proves. The knowledge of the fact of the exis-
tence of the cause, and the agent to be acted upon, together
with the effect, is in our opinion enough to settle the question
but as it harms bearing upon the pathology of the disease, we
leave it our object being only to enquire after that knowledge
which may be usefull to our fellow man. 

Considered claims a moment consideration in this place, for it
is still suspected by some persons but my few facts, and I am proud to say that in our Country, that monster Contagion can scarcely find a spot whereon to rest. I would here ask the suggestions of their opinion what they mean by this word Contagion, if they know what the word from its original means, the importing of disease from one affected to body to a vitally healthy body by contact, we declare it is not Contagion.

When we look into the works of the venerable Rush, and behold the steps taken by the College of Physicians to prevent the spread of the disease, and attached to these rules, behold the name of Rush and Griffith, I am lost in wonder and amazement. Fear is at once destroyed and falls paralyzed to the ground, but when after the mighty shock she is called to assume her former empire we are constrained to deny it intoto. The Epidemic of Philadelphia as it is called in 1793, it was called Contagion, when every breath of air was teeming with poison, or powder, spread over a large portion of the city by the wind which blew in that direction, it was inhaled by those exposed and because there was no person whose eyes did not see the poison of the improved microscope to see the cause which, whereas over the City like a dark cloud, they alighted not without a accid. Contagion! Contagion! Contagion!!

Dr. Rush seems to have been disposed thus, Dr. Chapman in one sentence openly declare their not to be a contagious disease and says from his observations of the great crowds in the hospitals and the innumerable efforts directed made in that city convinced him that it was not a disease of that nature. in another part of his lecture upon this subject he cuts his own throat
when speaking of the contraction of the disease we shall show
when we come to state his opinion on that subject.
And here we shall introduce the opinion of Theory of Mr. Bells
one highly distinguished professor on this disease; as we must
say it one which has stood the test of a long and successful
practice guided by the most scrutinizing judgment and obser-
vation. So far as we are able to judge, he has written well.
prudence having assigned to him the task, of removing the bottom
part of the structure commenced by his preceptor, and build-
ing I may say a theory, the correctness of which can only be de-
veloped by time and observation. His writings will be known
sprinted by physicians yet inform and a great full poet, will
entwine around his memory, monuments more lasting
and serene than those of laps a stone ever raised to the blood
stained conqueror of Greece a Rome, he denser its Centaur
and say, this disease like typhus fever has its cause float-
ing in the atmosphere, producing a disease of its own nature
manifestly not contagious, but indigeneous; whilst his ex-
periments and observations substantiate the fact.
I have seen the inhabitants of Norfolk in Virginia, when the dis-
case seized their leaving the town in every direction, after having
been exposed for a certain length of time to the cause, and of those
who abandoned the town, one man would have only a few promon-
tory symptoms, another the disease in its mildest form; whilst
a third would have it in all its combined, in proportion to the
power of the cause aspiled to the system, together with other concur-
rent circumstances, whilst the country people to whose hearing
they had fled, remained secure against the disease not withstanding
...
The death of the townsmen all around them, and from the disease which they brought with them, so it is obvious they only brought with them the effects and not the cause of disease. The Country people who had not been to the town had at the same time in the same town Common again forgot the practice of theirs own.

Garms and more to the astonishment of those ignorant of the nature and cause of their disease has their been a case of yellow Gone from Contageon. I ask the question of this disease, if they have ever traced small for a Measure to its source, had the discovery of many gone so far as to enable him to put his hand on the cause of either of those diseases, taking away the cause and arresting the progress of the effect. Was ever a case of either the above diseases Carried from a Town to the Country of the idle and Common permitted to visit them at will, and the disease not imparted to them by Contageon when these question are answered in the affirmative and acknowledged we will pound the arms of our patients content and acknowledge the inconstancy of our belief. But this subject is so intimate by reason of the subject of Contageon that we shall make a few inquiries on the subject.

Dr. Humphreys in his lecture upon this subject, seems to view it a contagious disease, although in the former part of his lecture he denies it. He here assigns to it a property which is one of the most distinguishing symptoms of all contagious diseases he says "it is my opinion that one attack prevents the system a gainst any future one as small for Measure." He thinks the Dr. has been very unfortunate in his hypothesis bravery scanty in his observations on this point. Of the writing,
of which we are to be acccused, he had the disease more than once
the evidence of Dr. Potts is unquestionable; he proves in his prac-
tice the disease may be re-contracted and as often as a man
changes his residence in different climates and is exposed to
the cause he will unquestionably have the disease.
Sir Gilbert Blain gave it as his opinion that a man can only
have the disease once, he like Dr. Chapman was to believe in
his opinion, we would as soon believe it a contagious
disease as that it could not be re-contracted and insist to
speak there is but a small about way to call it a contagious
disease. One person of the same practice tells us he had
this disease three times and that some of his patients, it
four times, and these facts are sufficient to per-
brute the opinions of Sir Gilbert Blamo and Dr. Chapman.
We now proceed to a grand essential to a correct knowledge of
this disease. It is a knowledge of which it is equally essential,
ally to a successful treatment. I mean the battle of

It is indeed true what gives rise to this disease
cannot be chemically demonstrated but it is the opinion of
many medical men amongst whom are the most celebrated of our
County and Europe that there is generated from the purification
of animal and vegetable substances, with a certain proportion
of heat and alternate moisture something which they have been
pleased to call "Marsh Eflavus". Persons are in its effects, are
producing in the human body where it is permitted to act,
in ratio to its prevalence and the length of time which it is ap-
scribed to the system to gather with the predisposition of the patient.
afirn from the mildest symptom to the most in malignant
Vellow. The Philadelphia Epidemic of 1793. Dr. Rush called
a Bilious Yellow fever, a name which is not altogether so definite
as we could wish; and we hold improper to name any disea-
se from a casual phenomena, and which if properly treated will
rarely or never be found beside it is well calculated to lead no
medical men to wait for a certain appearance or symptom before
they prescribe a certain remedy or upon the appearance of a
symptom which is characteristic of a notion and perhaps a di-
case of an agnoscite nature, which might be fatal in itself
itself, without due regard to the true state of the patient's case.
The Cause of this epidemic the Dr. ascribes to a-purifying bath
of coffee and hide upon Bulls Wharf, and that too, he
arrested this disease to Miasmata. The disease continued
to increase in malignancy as the cause became more evid-
ent, and the people were more severely predisposed, and by her indus-
try and ingenuity, he was enabled to trace the cause of the
disease of each one of his patients to their common source.
But when speaking of a miasmatic, there is some difference
of opinion and some confusion of writers upon this head; but
we understand anything which has a tendency to debilitating
and wear down the strength of the system or vital energies.
A miasmatic cause may go so far as to put the system in
itself, when the slightest cause a excitement may cause
the dormant and smothered spurt it to open and manifest de-
ease. The so much more readily and violently would the
miasmata act on the system, as it had been previously acted
on by any of the causes which wear down the energies of the
In like the natural antagonist of disease. The Measomie
Organic is also proved by Dr. Potter for he arrested the disease by
removing a quantity of vegetable matter from beneath the floor
of a whale house in this city. Dr. Gresham also thinks with
Charcot of the disease, and it appears strange how the Dr
from this circumstance of the nature of the disease cause of the
disease, could have believed that patients were ever after the
first attack safe from a second one.

The seat and thrane of this disease Dr. Rush tell us it the
departure system and his remedy were directed accordingly—say,
Dr. Gresham! Professor Rush through out the whole of his life
jealously and industriously maintained the yellow fever is
nothing more than a higher grade of Belcher's fever, that their
not being in clearly shown by the dissimilitude of the two causes.

He are inclined to think the only difference in the etiology of the two
diseases in the degree of concentration of the exudation, aided by the
created atmosphere of a city, and a retrospective view of the dis-
cases, which immediately preceded the evidence of 93 and the
di appearance of the disease, was the full development of
the yellow fever soon to strengthen the opinion. The very cause
of the epidemic, in its first evolution of exudation produced only
remitting fever in many of the 87 patients, and these very fever
gradually took on a more alarming aspect and character as
the cause grew stronger until the disease was fully matured.

I cannot say with Dr. Rush that it is always a higher degree of
Belcher's fever, for it is oft a congenital low fever.

Thus in a section of this state state I am informed from an unusu-
table source, where the inhabitants have only remitting fever.
whilst stings will have genuine yellow flesh, beginning with all
the proper pathognomonic symptoms of this disease, and ending
with black remote death. This seems to show the identity of
the two causes.

Dr. Chapmam states from the liver the seat of the disease, when
Dr. Rush with much propriety placed it and localized it in the
stomach. He says in fact: Upon examination we find an infla-
mation from the mildest blush to the highest grade, we fre
count find the stomach in a high state of inflammation. But when
speaking of the liver he says it is often found prematurely
enlarged, the bile in the sack of a heated and acrid nature
and so much diminished in quantity whilst marks of dif-
frent grades of inflammation are found. Then he acknowledges
the liver greatly concerned. I don't believe with Dr. Chapmam
I believe the liver is more frequently the direct seat of the disease than
any other organ; it is perhaps in more than 70 cases in the 100.
We are not at all surprised to find no bile secreted in so many
cases in digestion, for we have an opportunity of examining the
very eariest cases, so great is the check upon the nervous system
and the consequent congestion in this viscus and the whole body
is excited that no bile is secreted; a comparatively none
and that of the most most constricted quality and diminished quantity.
That the liver is as essential to life as the heart in any other
organ in the human body, and when per any cause re-
duced in capacity of performing its functions, and reaction
takes place, the same in the mortal consequence. doctor
the description of the natural function of an organ bill of disease to
use Dr. Chapmam and own words, yet find the liver prematurely.
enlarged and much changed in its colour and natural appearance. In common Belcher-burning fever, where the fever is only sufficient to produce violent reaction in the system with an obvious burning fever, there is a splenial and syphilitic the quantity is very much increased, and the quantity received, whilst in yellow fever of great convection owing to the high pressure of poison acting on the system there is none at all. The fever closely resembles the symptoms of that disease. It cannot be thought that the vomiting because in this disease is owing to inflammation of the stomach, for it is too prominent a symptom in Belcher fever and the direct influence communication between the liver andbrain stomach sufficiently accounts for that symptom. In injury of the head we see lachrymation vomiting, and in diseased liver we find the liver at times affected.

Dr. Davenport thinks that the miasmatic particle, are carried by convection during the heat of the day, and fall with the dew at night, and thus being saturated the poison entangled in it is swallowed and thus the poison is sucked into the system. I acknowledge it almost impossible for me to conceive such a thing, and if we allow its action upon the system through this medium, it appears that it would require a long time to drink enough of this poison to produce the disease. We should also recollect the fact that poison taken into the stomach (some of them) undergo by the power of digestion such a change as partially to decompose them or deprive them of their celloiaticous.
effects, and in some cases entirely cleave them of their
noxious qualities. There is a case reported to prove the
contagion of this disease, and which shows that it is possible
the poison does not act through the medium, of a man's
swallowing a considerable quantity of Black vomit with
composure. We deem this hypothesis of the Dr. to be the
"transparent fabric of a vision" but suppose the poison was
always swallowed and applied to the stomach as the Dr.
puts it is nothing more than natural to look for the ef-
facts of the poison always there, which is not true, and
whilst we are led to doubt the correctness of the Dr. for
now we can but admire his ingenuity, it comes in like
a strange partner and plays well into his hand.
If this opinion be true, how comes it that we see no
coming into the towns fester, where this disease prevails,
between the hours of 12 & 4, which contract the disease
they cannot receive it through their stomach, for the
die is not yet falling. How shall we account for
the fact of a Man's traveling through a micrometric
district, and perhaps not exposed for an hour centi-
ting the disease (Dem. 7. 4).
We do not positively know how the poison acts upon the
system, tho' it is perhaps as Dr. Potter thinks through the
lungs. If we base positively upon what set of nerves
it acted, or how it was conveyed through into the system
to different parts, we should have no difficulty in
accounting for the production of Yellow fever, from black
affluence. The Dr. shews more plainly the ingenuity in
in applying the principles of the Brunonian Doctrine in this case, than the manner in which the poison acts on the system to produce the disease. Shall we then suppose Communication between the lungs and liver at once to account for it through the medium of Symmetry and the continuation of the poisonous effect, pernicious to the latter, for we see on the onset of the disease great alteration of the functions of the lungs? Or whether from the acknowledged expensiveness of the functions of the Liver in connection we are to account for the action of that poison through the medium of the Circulation, we can say nothing positively, it is all conjecture, and we are not compelled to imagine immediate death from such circumstances, whilst there are symptoms which seem to support that such an hypothesis. Why Marsh Effluvia appears to have an elective attraction for the liver we can not say, and we must suppose that the same channel through which poison is conveyed to common Belcher is for poison is conveyed to yellow fever. Whatever this difference be it is of little importance, since its effects are generally found there. Neither can we say why Marsh Effluvia produces Belcher fever or yellow fever why the bowels should commonly in the liver and Belcher system demonstrate the problem of one and the other is immediately killed. We can but think that certain poisons have an elective attraction for certain organs and tissues, as well as certain medicines, and as it is the same poison that produces
as well as Belcher's fever, we must naturally, in our best cases in the same set of organs. Besides the action of Calomel how it acts, by evulsive action of the liver, &c. upon the skin, kidneys, &c. prompt upon the skin either by the action of the liver, &c. will be the answer, every day experience proves the fact, and we should rejoice that nature in her good help has wisely ordained such things.

The Black Venom says H. Chapman is a rectified secretion from the, and not bile. I do not believe it a secretion from the stomach, and if it were a secretion of a rectified nature, how comes it to pass, that the rectified secretion of an organ is the only one from which patients never recover, a particular not one in the hundred. We see rectified secrections from the liver, kidneys, the organs and yet upon七大 those organs in a proper secreting condition patients recover, and say Oil.

Doctor I never saw but one or two men recover after they had the black venom. I am inclined to think that 13 N. is composed of the Mucous Coat of the stomach, digested Blood of other fluids, we can distinctly see flores of this Coct. floating in that fluid and upon inspecting the Coat of the stomach were abrasions in many parts of that organ, and other signs of disorganization and death. There is a Black Bile which should be always distinguished from black

writing the above in April 1829. Dr. Griffiths of Philado. has said something to her opinion of the medical remedy.
Cimet. We judge from the well known fact, that the dies eases of heat and warm weather are principally derived from the liver, and heat acting on it is well known upon what diseases predisposing it to disease, thence we account for the superabundance of liver diseases in warm climates.

The liver from the season of the year, the nature of the epidemic which prevail at that season, and the commonest cause (heat) acting upon that organ renders it undoubtedly the most probable seat of yellow fever. But we do not go so far as to say that the liver is always the seat of these cases, we are aware that some predisposing cause may from, deprivancy, excit the disease and locate it some other fluid, as large drops of ice water, ardent spirits, indigestible food, which at other times might produce gastritis or cholera; also, watching great anxiety, and heat, heat study, will speedily expose the brain and send it chill to be poisoned by the disease, which can never to debilitate the stomach and cause down. The fever may also be predisposing cause to the disease in the organ, which well disposed by follow up the patient to expose the influence, and then too under such circumstances to find the ravages of the disease. We agree that at the disease occur at that season of the year when heat is by far the most common element to which we are exposed, and by long observation and nice description, it is found to act on that organ and predispose it to the action of exciting cause; we are bound to think with Prof. Rush, Hitter in placing the disease in the liver, without the least sho.
of Contra evidence. The symptoms which commonly manifest themselves are—taste, vomiting, with a pain in the region of the stomach, of liver, tooping to fro in the bed. These symptoms mark great intestinal congestion, In the most dangerous form of the disease, the patient is alternately hot and cold, which is a manifestation of a large quantity of poison acting on the system, almost destroying life itself, no action can not be established, and yet if we stimulate as in Tephers we kill the patient. If it were at the onset of the disease we might take before we give any internal medicine, a few of Blood, administering Rancor at the same time to purge fully and act upon the liver. The pulse after three or four free movements of the bowels, which the head would facitate, would it in more than probable so, as to require five repeated H.

Upon reflection of the different epidemics detailed by Prof. Potter, it seems to be correct in laying down two general principles which may serve as in the management of these diseases. I am aware that any regular set of rules laid down to be adhered to strictly, would not be comprehended—It would not do to practice in every epidemic empirically. Casual circumstance, or symptoms would arise—demanding the attention of the excellent practitioners. We may, we think with great propriety strike their disease into inflammatory form when the system has received too much poison so to our power, the vital energy they are able to make open and told resistance again.
the enemy, the culprit, face - I say all shows that the
system is contending with great power and would soon
exhaust its strength - this is the first species requi-
ring vigorous blood letting for its management with pushter,
for it must be called "Pushter for Fiefe".
These few small points of the symptoms show that the
system is acting upon itself destructively by its passive
activity exercising its own power, it is our duty as phys-
cians of health to obviate these symptoms by these remedies
which common sense and experience have proved to
be the natural antagonist.
The Other Clapoty
when so much power has been taken out of the sys-
tem as to own power the sick\cere. Reaction cannot
take place, the force is too strong, there will be in this
case all the symptoms of great congestion, and hence it
is proper to recollect that this species seeming prescrue
of strength is not agency to delicacy but to the Quantum
of force. This must be our knowledge as we direct
the patient by what would seem the natural remedy,
called for by the prevailing symptoms.

"Gave one gr.

Opium, X gr. Ammon. 2. with one hand, and you bring with
the other a dagger in the coron of your patient."

Congestion is the language of every symptom, the Organs
especially the liver is affected in its function,
secretion, corrosion, its sensibility is lost - it lies
inactive if it is this species of the disease which is in-
voked most deeply in secuity, and require more decri-
mination than can management then the former.
let us look at the state of the liver and other organs. They are in a state of sleep and have ceased to perform their natural offices. To understand its treatment it proper that we should look for a remedy of a peculiar natu

slightly stimulating for a moment or two by powerful

executive. Salomel is in its first action stimulating to the liver, and it is called for when the present energies of that viscus and arouse it into action. The treatment is the reverse of the former as the system is in an opposite state, we must have only in large doses of salomel produce an effect as an
weight perhaps bring into our aid. In all its.

To convalescence, nothing which stimulates the patient should be suffered by any means, they will reproduce firm when the system cannot, stand the remedial to assist one as present. I have little faith in that etc. Of remedial can time, in convalescence for firm, for some of those of disease cause is will likely call it forth into open process. Nature is sufficient if we remove the offending cause, and this should be attended prudently, is sufficient to increase the strength and tone of the system which been lost.
An Inaugural Essay on Cholera Infantis
Submitted to the Medical Faculty of the University of Maryland by
Robert McTuffy, a Candidate
for Graduation, March 14th 1830
When this essay was written, in the fall of 1828, it was done only to amuse myself and pass off some leisure hours. I had not at that time the remotest idea of ever submitting it to a medical faculty as a thesis, for at the time of writing it I had never attended a course of medical lectures. The opinions which I advanced were considered heretical by my friends, and opposed to all authority, but when I had the pleasure of hearing our learned professor of practice, Dr. Potter, I determined at once to submit the following pages as a thesis, as I found him kind enough to advocate for many of the opinions which I advanced.

Robert McCurtis
Cholera Infantum.

From the entire silence, which the ancient Physicians have kept relative to this disease, we must suppose it to be of modern origin, and indeed it appears to be exclusively confined to our own country, as far as I have been able to judge from reading, and in accordance with the opinion of the learned Professor of the practice of Medicine, Dr. Nathaniel Potter.

Over our extensive Country, this disease makes its appearance, at that time, when the heat of Spring succeeds the cold of Winter. In the Southern States, it makes its appearance, as early as April or May; in the Middle, between the first of May, and last of June; in Philadelphia it seldom appears before the middle of June, or beginning of July, and generally continues until near the middle of September. See Rush's Jour No. 1 p. 216.

The Cause of Cholera Infantum, is not settled by Physicians. Those, which have been most frequently thought to have produced the disease, are Distemper, Worms, Summer Fruit, Bad Diet, Indifferent Clothing, Miasmas, and Heat. Each of these causes, has been warmly advocated by able Physicians, but unfortunately for the science of Medicine, the dissensions still continue, without the slightest prospect of their shortly ending.

In the investigation of diseases it is natural for us, to inquire first, into the Causes of the disease; and secondly of a variety of causes, acting upon the System, can produce
the same disease. In this manner, we propose to investigate
the causes, which have been supposed to produce cholera
infantis; and the first, which comes under our consideration
is dentition. That this process alone can produce the disease,
is so contrary to observations, as to appear almost a waste
of time, to enter into any arguments to disprove it. If
dentition were the cause, why does not cholera make its
appearance alike in all seasons? That dentition produces
a train of diseases, is a fact as well established as any
other in medicine. Acting upon the movable systems of
children, any violent cause appears to disorder the
digestive organs much more easily than in adults.
Dr. Burns, in speaking of dentition says, "if the child be
very irritable, and the teeth advance fast or several teeth
come forward, at the same time, very unpleasant effects
may be produced, such as severe bowel complaints, or
fever, or spasmodic cough, or convulsions." &c. &c. These
remarks are confirmed by a number of physicians of equal
authority. There can be no doubt that dentition very
frequently is an exciting cause, and always aggravates
the disease. Cholera more frequently attacks children
during the period of teething, it seldom makes its appear-
ance before the sixth or eighth month, nor after the
twenty-fourth. Dr. Rush, in speaking of cholera says
"dentition, I acknowledge, sometimes aggravates it; hence
we find it is most severe in that period of life, when
the greatest number of teeth make their appearance,
which is generally about the tenth month. I think,
I observe more children to die of this disease at that age, than at any other.

Worms: The same objection to any imitant, which is present at every period of the year, holds good to this, the disease under consideration, in an epidemic appearing at a certain season of the year, while children are as liable to be affected with worms at one season, as at another.

In a majority of cases of Cholera, not one symptom peculiar which would lead us to believe, that worms were present, and in post mortem examinations no worms can be found.

Summer Fruit: If this cause Cholera has also been attributed.

If this were the cause, why does not the disease prevail more extensively in the country, where fruit is much more abundant, than in the large cities? Why does it not also attack children of three or four years old, who eat less times the quantity of fruit, that children of a like age do? Why do we sometimes meet with this disease in April, or May, when fruit is rarely to be met with? There is no doubt, that fruit disorders the digestive juices very much, and that it frequently produces diarrhoea, and other diseases, which we meet with during the season, in which it is most abundant.

Digestion is more easily impaired in infancy than at any other age, as is seen from the frequent vomiting of ascendent matter, and the appearance of fermentations in the feces, after they are passed.
Fruits when taken into the stomach, impair digestion in two ways, first, by its irritability to pass into fermentations, and secondly, by its insolubility and resistance to the action of the gastric fluid. Dr. Lewis, in speaking of the comparative degree of facility with which substances are digested by such of the vegetable class, which may be considered with young stomachs, of more difficult solutions than almost any of the farinaceous substances in common use, consequently must be left proper. It is in this manner, I think fruit may become the exciting cause of cholera, when the system has been under the influence of the preceding causes; thus we can account in what manner cholera was produced in the cases recorded by Dr. Lewis. He says, we have witnessed this season three instances of dangerous cholera, brought on by means of these fruits, meaning the dew and blackberry and one which nearly proved fatal from the use of the lupus of blackberries. See year 1844. Drus in diseases of children.

Bad Diet and Indifferent Clothing: These can only be considered as exciting causes, and they appear to have very considerable influence in the epidemic; these poor children are peculiarly liable to this complaint; and the mortality is much greater among this class than any other, evidently showing that bad diet and indifferent clothing have great influence upon the disease.

These causes are alone capable of producing some complaint, indigestion, exhaustion &c., &c.
Measles: This poisonous, repulsive, and turberculous disease, which is thought to affect in more victims to the elemental fires, than all the other agents. That contend against the life of man, is conceived by a great number of enlightened physicians to be the only cause of cholera infantum. This protract vapour, like an aversive vicegerent, not content with the ravages which it makes upon man, annually, in the various forms of fever, for lately thought, it would be more acceptable to it, gaining master, death, to send a few millions of infants to the icy grass shades.

It is with diffidence, I dissent from the voice of authority, but when we are impressed with the belief of an error, by our reason, no matter how humble that faculty may be, would it not be better for us to express ourselves candidly, than tacitly assent to doctrine, which we are unable to comprehend.

The first objections, which are made to measles as the cause of cholera, is, that the disease is not always found, when our cities and country are affected with bilious and intermittent fevers. This I think a serious objection, for would it not be rational to suppose, that if the same causes produced both diseases, they would appear pari passu. Might it not also be expected that the two diseases would have intermediate grades and occasionally the types changing from one to another, as in remittent and intermittent fevers. So far from this, it is a fact established by experience, that children are peculiarly
exempt from Bilious fever, and where in no situation, or under any circumstances ever have Cholera. Another objection is, that instead of these diseases appearing at the same time, we have Cholera in the Spring, and early in the summer, and Bilious fevers prevailing in the Fall. It is true that there are exceptions to this, for two sometimes meet with the different types of fever, in the Spring, and Cholera in the Fall, Months, but those exceptions proves nothing. How often do we see an evidence of the most alarming kind, where every variety of type, from the mild intermittent, to the malignant yellow fever can be found, but not a single case of Cholera Infantis at all? The reason that Cholera makes its appearance earlier than remittent fever, is attributed to the constitution of Cholera, being more predisposed from weakness to be acted upon by the remote, which produces those diseases? Does experience confirm this? I believe not. Do not Children bear surgical operations, much better, and recover more expeditiously from them, than adults? Have we not instances on record, where the mother has been found dead, from the inclemency of the weather, and a living infant at her breast? What preserved the life of the infant longer than the Mother? Surely it could not be its weak and debilitated constitution.

If we were to admit that the "constitution of Children, were more predisposed from weakness to be acted upon by Materia Medica", what would it prove.
That is a small quantity of measles, mingled with the atmosphere, were capable of producing cholera; as it becomes more dense, and pervades a larger space, in the same proportion, would cholera become more malignant, and that September would be the month of the greatest mortality; also that in those districts of country where bilious fever rages with great malignity, there also would be a sufficient quantity of measles to produce cholera by acting on the constitutions of children, already predisposed to be acted upon from weakness.

Heat. This is the last cause, in which cholera has been assigned, that I shall notice; and in this alone as the predisposing cause, do I attribute all the cases of Cholera Infantum. The inequalities of climate, exert a wonderful influence, on the constitution of both adult and infants, producing a number of diseases and changing the type, or character of all diseases of an epidemic nature. Man is capable of withstanding a certain degree of heat or cold, for a short time, without any sensible change being produced on his constitution; but if he continue under the influence any length of time, the effects will be visible.

Heat and cold are relative terms, and we judge of them by the effect they produce on us. A certain degree of cold, exacts a tonic, and invigorating influence upon our constitutions, causing all the vital functions to be carried on more vigorously; and our diseases to
be of a more inflammatory character. Beyond this cold produces direct debility, and if carried sufficiently far will produce death.

Heat acts upon the systems in a twofold manner; first as it does upon matter, secondly, as upon vitality. First, the effect of heat upon matter. It is a law, and to which there can, but few exceptions, that caloric expands matter, by producing a separation of the solid and fluid; the second and inapparent, which we feel during warm weather, and which is more perceptible after a sudden change of cold to warm weather. in my opinion, measureably produced by the sudden expansion or relaxation of the solid and fluid.

The second manner, in which caloric act upon our systems, is peculiar to vitality. Its action is twofold. First by stimulating the systems and secondly by producing direct debility. Heat as a stimulant is necessary to vitality, without it life cannot exist. Professor Rush in speaking upon this subject says, "Heat is a uniform and active stimulant in promoting life." The kind of heat the systems is capable of retaining in an atmosphere many degrees below it, but if the systems were placed in a temperature in which it could not preserve a different degree of caloric to stimulate
The vital functions to action life could no longer exist.

Heat infinitely has a power of rendering a greater of
heat, without being impaired, than would be condu-
sive to health, if it had not this power; but if the
heat be excessive and it stimulates the organs to
unusual action, they soon become weakened and then
indirect debility is produced. This is the manner in which
debility is produced. Professor Chapm.an remarks speaking
on this subject says, "Heat directly stimulates the
system, but its first effect is followed by relax-
ation, and exhaustion, which renders the system
vulnerable to disease."

During the winter there is sufficient heat
produced by various causes, to stimulate the system
to healthy and vigorous action, but as soon as
spring comes, the heat decreases to stimulate the
system, which becomes fatigued from inaction;
and then the debility follows; heat also acting at the
same time upon our bodies, as it does upon other
matter, as we have attempted to show above, impairs
digestion and lays the foundation for bowel com-
plaints. These effects of heat we all feel more
or less, but on the system of infants, which are
much more irritable than adults; the effects
are by far more deleterious, especially during
the age of teething, when children are so liable to
Choleræ Infantium.
That heat is rather the sudden changes of temperature from cold to warm, is the predominant cause of cholera, we think, may be proven from the nature of the disease itself. Cholera makes its appearance at that season, when the season is more nearly agreeable to un- dure action, that is, when warm weather suddenly cold, and before the constitution can adapt itself to the sudden change of temperature. Is it not at this time that results feel the effects of heat more sensibly, than at any other? It is at this time, that the brain, as well as the bowels, appear to be too completely unstrung, that action becomes so repugnant to our feelings. How is the time, that we would enjoy “ventus in umbra”.

A cool day frequently abates the violence of cholera, and disposes it to a favourable termination. How does a cool day abate its violence? Is it not by abating the great degree of stimulus, and leaving the system of the infant in a less excitable state. Heat having already predisposed the system to decay, some exciting cause, such as impropriety of diet, bad clothing, leeching, fruits, premature wearing the produce the disease, and it continues to increase in violence, if not prevented by medicines until we have a cool day, when a portion of the stimulus of heat is removed, and then the disease abates. In the same manner is the beneficial effect of a removal from a “large city,” to the country, to be.
accounted for, the temperature of the large city is several
degrees higher than in the country; and by removing to
the cool atmosphere of the country, you leave behind
the cause of the disease.

The prophylactics are such means as will protect
the patient from the injurious effects of sudden and
frequent changes of temperature, and which will
keep up the tone of the organism. They are, the constant
use of flannel next to the skin, cold bathing, mild and
nutritious diet, and keeping the child to the breast, until
the time of cholera is past.

The symptoms of cholera, are as various
as the causes, to which this disease has been ascribed.
It sometimes begins in the form of diarrhoea, at
other times the stomach is primarily affected, and then
the disease is ushered in with both vomiting and
purging, sometimes it is attended with violent
torment. In its ordinary form it is attended with
an irregular remittent fever, the paroxysms being
highest in the evening. The pulse is small, quick and
feeble, or corded and irregular; it is rarely full and strong.

The circulation is very unequal, causing great
determinations to the head, and abdominal ascends.
The temperature is also so unequally distributed
producing a burning heat over the head and trunk,
and great coldness of the extremities. There is great
tendency to stupor, or delirium, and in some instances
there is frenzy. The eyes also denote cerebral
arrangement, they are generally languid or lethargic, but sometimes are very fierce, at other times they are very insensible, and the child sleeps with their half closed. Dr. Rush says that "such is the insensibility of the system in some instances in this disease that flies have been seen to alight upon the eyes when open, without exciting a motion in the eyelids to remove them. The cerebral affections appear to be sympathetic with the stomach or affection there is no excited state of the brain to be found in recent cases.

The thirst is very great, and frequently the intolerable of the stomach is so great that as soon as water is swallowed, it is thrown up again, without satisfying the thirst or diminishing the clamour of the infant for water.

The evacuations are various, both in their colour and consistence. The natural feces are generally retained, while bloody thin discharges, occasionally mixed with blood come away. The color of the discharge may be greenish, yellow or brown, or resembling cattle carmine. They are sometimes insipid, at other very offensive. In some cases the alimentary canal, becomes so irritable that the food passes through unchanged, except a disposition to turn into the fermenting or putrefactive state.
There is no disease in which emaciation takes place so rapidly as this. The child at first becomes pallid, and the flesh soft and flabby; then the fat on the inner part of the thighs and arms, begin to disappear, and finally so completely in the fat absorbs that the skin hangs in folds, appearing entirely too large.

This disease may be divided into two stages, at least this division will enable us to describe the disease and treatment more satisfactorily. 

Acute and Chronic. The acute if it assumes the form of Cholera Morbus, runs its course in a few days. It is in this state, that all the symptoms are more violent, the bowing is very great, the fever is considerable, the thirst insatiable. It continues from two or three to eight or ten days, and if nothing be done to check the disease, it either ends in death, or degenerates into a dysenteric form, which I call the chronic form. In this, the discharges are very frequent, sometimes as often as fifteen or twenty in the twenty-four hours; the child either lies perfectly still and inactive or takes its head and arms about, and making a continued moaning noise, it is regardless of either drink or food, and I think it must be in this state, that the inescapability of the eyes is so great that a fly lighting on the ball does not stimulate the eyelids to motion. This stage sometimes continues from four to six or eight weeks.
The Child now has truly a distressing appearance. The skin on the forehead appears to be stretched almost tight enough to burst. The Cheekbones are ready to start through the skin. The eyes are hollow and sunk, the balls appearing muddy or inflamed, the pupils are either dilated or contracted, but more frequently dilated. Sometimes, the eye has a very sprightly appearance but frequently it is a deceptive symptom. The nose is sharp; the lips are chiseled, and the whole eyelids appear to be so emaciated that dissolution would appear to be about taking place, but sometimes the child recovers. The abdomen also becomes distended from flatulence, the feet and in some instances I have seen the face edematous. If death takes place it is either from Effusions in the Peritone or one of the consequent terminations of inflammation of the Trunc, Peritone, Mortification or Adhesion.

The symptoms of this disease are so few that it would appear almost impossible to mistake the disease for any other; therefore the diagnosis is very easy. The prognosis is more difficult. Sometimes we see a child apparently in Acute Mortis recover, again cases which did appear to be at all dangerous to a casual observer have terminated in a few days fatally. When the pulse becomes fuller and slower, the temperature equalized, irritability calmed, and the discharges changed to a natural colour, or become dark and
tenacious, evincing a restoration of the bilious secretion, we may judge favourably. On the contrary, if the symptoms of the disease are violent and the discharges give this character a pink colour or resemble greasy water, or are of a dark flocculent matter, attended with extreme nervous sensibility, or an entire extinction of it, the child lying stupid with its eyes half closed, or with occasional convulsions we may expect an unfavourable result. Dr. Dewes mentions some symptoms which he says are fatal. The first is "a crystalline eruption upon the chest of an immense of cloudy vesicles, of a very minute size". Another symptom, which attends the last stage of this disease, more common but not less fatal, is the thrusting of the fingers, may almost the hand into the back part of the mouth. Another is the escape of a live worm or worms in the chronic stage of this affection.

In post-mortem examination, we find no decided state of the brain in recent cases, except congestion, but in the chronic stage, we find effusions constituting hydrocephalus. The visceræ of the thorax are not diseased, but it is in the visceræ of the abdomen that the ravages of the disease may be discovered. The mucous coat of the stomach and small intestines has dark lines spotted over it, the consequence of previous
Inflammation. Congenital lymph is frequently found spread over their surface, and sometimes on detached pieces. The coat are sometimes thickened, as to reduce the size of the caliber of the intestines considerably. The large intestines are most diseased until the disease has assumed the dysenteric form. The liver is always found more or less diseased. It is considerably enlarged and its substance is more firm and hard than in health owing to the great engorgement. The bile is not changed. The gallbladder is filled in some instances with dark green bile; in other instances it is of a pale colour. The bowels contain a thin tenacious mucus occasionally involving lumps of fecal matter.

In the treatment of Cholera Infantum the indications are first to calm the irritability of the stomach, and restore the liver and bowels to their healthy secretions; and secondly, to impart tone to the enfeebled system. As the irritability of the stomach is, in my opinion, principally owing to a congestion of the portal system, I should recommend bloodletting in the early stages of the disease, provided there were no symptoms to contra-indicate it. Bloodletting will sooner relieve the congestion than any other remedy but it should be assisted with mercurial purges and if necessary a blister may be applied over the epigastric regions. Emetics are very highly recommended by high authority in the early stages of this
disease. This practice may be successful, but from the little experience I have had in this disease, I am inclined to believe to the contrary. If the patient complain of great nausea and dilution of the stomach, and is unable to eat the undigested contents, I should have no hesitation in prescribing a mild emetic of camphor, but in the other circumstances would I see it. Does not an emetic irritate the stomach to produce that achow which we call emesis? But it may be said that emesis produce beneficial effects by equalizing the circulation etc. To this, I should say, that as vomiting is one of the most prominent symptoms of the disease, and one which is very troublesome to the patient, we could not calculate to diminish the disease by increasing the most prominent symptom of it, and I would ask, what benefit would artificial vomiting, be over that which is produced by the disease itself.

Bloodletting can only be resorted to in the early stages of the disease, but if the fever be not very high, venesection may be dispensed with. Our principal reliance should be placed in the free administration of enemae doses of calomel, which should be prescribed as soon as possible. It not only complicates the stomach by removing its contents, but it also emulges the liver, and produces the secretion of all the abdominal viscerae. Physicians have differed in the quantity of calomel which should be used

some recommend large doses, others small ones. From my limited experience, I am not able to decide which I should prefer, but from the opinion of many learned men, I should use Calomel in small doses frequen-

ly repeated, say from 1/4 to 1 grain three or four times daily. Dr. Dewet recommend Calomel to be used in conjunction with Opium in the proportions of 1/4 gr of the former to 1/3 of the latter. Many other able Physicains have recommended Opium, and it would appear presumptive in me to deny the beneficent influence of it in this disease, but as I consider the disease to be an inflammation of the mucous coat of the stomach and small intestines, accompa-

nied with great congestion of the liver, I should fear the administration of opium. Calomel should be continued daily until the discharges become more consistent and their colour more natural: ensuing a restoration of the healthy secreto-

rof the liver. Many other remedies have been recommended, but as I consider Calomel to be one in which reliance can be placed I will not take time to enumerate them.

If the colic continue, the application of Blister to them are of very great importance; they tend to equalize the circulations, relax the skin and remove congestions. A blister over the epigastrium is sometimes of great benefit, in tranquilizing that organ.
The warm bath is of great utility, during the acute stage, when there is great insensibility of temperature, and it there is much sensibility of the skin it would be advantageous to add some stimulating substance, such as Murex, brandy &c.搜救 should be used after taking the patient out of the bath.

In the treatment of the chronic stage of Cholera, when it assumes the form of diarrhoea, the antiphlogistic plan should not be pursued to the extent as is recommended in the acute state, as the inflammatory symptoms have greatly subsided. Small doses of saline combined with some of the astringent preparations may be used with great advantage, if there be any acidity of the stomach. Alkalies have also been highly recommended, combined with opium. In those cases where the diarrhoea is frequent, I have been great benefit derived from the following preparation, like Carb. Magnusie and put it into a thin paste with water

The dose of this is one teaspoonful, to which is to be added one drop of the tincture of opium, and one drop of the oil of Anise, for a child of one year of age. This is to be given after each thin and watery discharge.

Astringents have also been highly recommended

Dr. Mayock speaks very highly of a saturated decoction of logo wood in doses of a dessertspoonful every 10th hour. This saturated decoction of the root of the Gumtree it is a powerful astringent and has been highly recommended in doses of a table spoonful. Sacch. Saturni has
been administered combined with opium, in the propor-
tion of 1/2 of the former, with 1/6 or 1/8 of the latter, every
two or three hours. Alum has also been used combined
with opium. Dr. Deyes recommends that Twelfth: in
this stage of Cholera, he says "with this, we have
several times succeeded, where we hope was abandoned.
The dose is from five to twenty drops, three or four times
a day in sweetened cold water."

To remove vomitus, give injections of melted butter,
chow and such like articles, are of great advantage.
Dr. Bapst, gives the highest of the first. And these
injections should be used to calm the irritability of
the system.

The treatment of the tlepible stage, is much
more plain than the first. After the sickness is
reduced, frequently nothing more is required than a proper
regard to diet. Sometimes tonics are of great advantage
and of these the sulphate of tineine appears to be the
best. It may be given in doses from 1/6 to 1/2 grain to a child
a year old as occasion may require. The infusion of
colombo is also used. The best of all tonics is cool air, and
it is this which is so beneficial, in the removal from the
heated atmosphere of large cities, & Kuch says he never
lost, but three cases of Cholera, out of many hundred
which he met in the country.

Diet should consist of breast milk, sweetened low
milk, gum arabic tea, barley or marshmallows tea, or
browned bread and water, in the acute stage. In the more
advanced stages. The nutritious articles should be used, as sago, tapioca, arrowroot, jellies, thickened with boiled flour, &c. A little ham or salt pork may be allowed in cases of extreme debility of the stomach and bowels.

In all stages of the disease the child should be completely clothed in flannel.
An Inaugural Dissertation
on
Prophecy
Submitted to the Examination of
The Reverend Officers of the
University of Maryland
for the degree of Doctor of... on the fifth day of June, 1840
Printed for the Author
Annapolis
An Inaugural Dissertation
on
Aphoplexy
Submitted to the Examination
of
The Provost & Professors
of the
University of Maryland
for the degree of Doctor of Medicine
on the fifth day of April 1830.
By
Pans yr Sullivane
Of Dorchester County
Maryland
To

Thomas Woolford MD

This dedication is inscribed as a tribute of gratitude and friendship.

By the Author
Of all the diseases with which the human race is afflicted, there is none perhaps, more violent or sudden in its attack, or more fatal in its result, than that of apoplexy, which in its most violent form, baffles the skill of the most able physicians, and eventually terminates in the life of the patient. It is unnecessary to enter into a minute detail of every hypothetical opinion that has been incubated centuries back; various theories have been advanced and numerous controversies published by the ancient writers, without much tendency to throw light upon the subject. Individuals who have seen to fall or have struck down, without any obvious cause, give rise to numerous conjectures, and as there are months of examination were not attended with satisfying results, they
concluded that they were struck by some supernatural power. In opinion prevailed at one time, that they certain maladies occurred at particular periods of the year that produced these diseases. Opinions of the authors were also supposed by a visionary pathologist to be the remote cause of this plague; and many other opinions I might mention, but they would by no means tend to elucidate the subject. I shall now proceed to relate some of the more moderate and lucid opinions of those writers whose objects it aimed was to depress some morbid affection of the brain of these persons who died of this disease and in this tragic case I believe, partially succeeded. Some maintain that effusion of blood or humor is always the cause of apoplexy; others consider that interrupted circulation is the sole cause; another is that it proceeds from injuries on the brain, but it is very evident that
we cannot take place well without the other. Unless of their opinions
have been supported by ingenuity argument or sound reasoning I
admit, but they must depend upon these circumstances, when in
fact they all contribute to produce it. It is obvious to that of the
perception be interrupted from congestion in the bloodvessels, from
their being bane previously diminished, effusion will be liable to tak
place either in the ventricle or substance of the brain, which produc
ning a seizure, which is commonly the cause of a convulsive or epileptic
state. But we have cases on record which state effusion of venous
concentration of blood has taken place without an epileptic fit being the
result, but that I can hardly credit. I believe that if the thrombosis
of the brain be limited to by any way, directly or indirectly, such as the
use of anactive spirits in a real degree or by a continual habit of persuading
upon high venous feed, by excessive heat, or by any other debilitating
new, an accumulation will take place of the heart to be expelled. If 
any exciting cause evacuation will inevitably be the result, which 
resuming upon the surmising, practically destroys the various influence 
consequently becoming apoplectic, or hemiplegia, but more generally 
the same forces upon the head producing vascular spasm produce the 
dehydrated effused water is the same anotherSense. This circumstance has 

occurred to various persons, individuals also haveed 

upon this dispute to make a distinction, between apoplexy produced by 

evacuation of blood & apoplectic from effusion of water, has divided it 

into distinguishable senses. From their finding water in the hair of their 
fur, especially their icicles, the belief as they thereof. They concluded that 

This fluid was thrown out in consequence of diminished action of 

the of the arterial system. It would then you appear that the 
system must be in a state of extreme delicacy, that the heart & arteries 
must be reduced in their action before this effusion of water.
would possibly take place. This first flaw, for no indication of
some fluid can be produced that in no way of without the nature of
some acute or chronic inflammation, is the effect produced by the
inflammation is deadly, which they believed to be a constitutional thing
not proceeding from a previous increase action of the heart or artery.

Some authors have thought proper to denominate apoplexy proceeding
from this cause 'Hydrophobia'. Our learned physican in the
practice of physic thinks it a useless and unprofitable term, that there is
much disease, so I am disposed to adopt this opinion, for if there is
water in the brain it comes under the less hydrophobic disease as is
found by hydrophobia; if there is extravasate blood it is the apoplexy.

To prove our case an individual fell down suddenly in an apoplexy,
the pit deprived of sense and motion, with water alone in his ventricles,
Some extravasated will generally be found, inflammation of the
numbers will also sometimes be seen. Blood is drawn very often
found in the brain at the same time, on the small opened reunited vessels
the other the effect of a mortal wound. Carbonic acid gas will
produce apoplexy. There were some experiments made by a magic
an the subject, the name has escaped my memory, but who
showed that it acted quickly upon the brain, how it acted in this
way I cannot possibly divine. If you cause the gas to be inhaled
in a concentrated state, you will produce instant death by stopping
the action of the heart. But if in a diluted state, you will be able
to ascertain what effect it will produce upon the brain. That
I as a physician I do not believe, I cannot persuade that it
has any specific action whatever upon the brain. It is a product
of his own fertile imagination, founded upon another.
ground than that of theoretical speculation. To account for its
acting negatively is no difficult matter, we know that the blood
goes to the lungs to lose its carbon, but if it meet with gas
with which carbon itself is intimately combined, it is evident
that no combination will take place, as the blood will return
to the heart in a state carbonised or impure state, in consequence
of which, an accumulation of blood will take place in different
parts of the system. After this, the individual who inhaled the
carbonic acid gas, be exposed to pure atmospheric air, the heart will
recover its tone, by sending its blood with considerable force to the
congested parts; extravasation will be liable to take place.
This, the only way, believe, by which asphyxia can be produced
carbonic acid gas. I have thus far related what I believe to
In the remote and remote causes of this disease, I had now
proceed to state the condition, habit, of these persons, who are
generally predisposed to apoplexy. All individuals of rang
uous, temperament, short neck, corpulent habit, fast
lack a head, broad shoulders, short stature, are predis-
ated to apoplexy. If physical predisposition is very often hereditary
the malformation of different parts of the body, heredity
is very often hereditary, but independent of this hereditary
predisposition from peculiarity of organization, then may
point a constitutional tendency to the head, the knowledge
of which may materially assist in forming a right-
judgment on the origin or probable tendency of particular system,
Persons who are in the habit of drinking much wine or other
spiritual liquors are predisposed to apoplexy, persons who
and much high-seasoned are likewise predisposed.
Exciting Causes

The exciting causes of apoplexy are numerous, such as

distention of the stomach by a full meal, violent exercise, some

fits of coughing, sleeping any length of time, desperate efforts

to evacuate a constipated, immoderation of wine, excessive heat.

what is very surprising, extreme cold will excite the disease

generally excites drawings, and if it be indulged in at the days

to wake no more.

Symptoms

Apoplexy like all other diseases is always attended with

premonitory symptoms, which, fortunately for the individuals

who are subject to it, enable the physician to apply his remedy

with more effect. Perhaps there is no disease which presents

a greater variety than this; the usual are as follows.
pain, as if the head were bound round by a tight ligature. 

Stupor & disposition to sleep, oppression of the brain, swelling of the temporal arteries, hemorrhage from the nose, this is a favorable symptom, many persons have been raised from a paroxysm by this circumstance, dimness of vision, 

sensations, transient blindness & deafness, falling of things, 

and incoherent expressions, stammering, dragging of the words, & various other signs which denote the rapid approach of a paroxysm. After an individual has one or more of these symptoms, he falls down, deprived of sense or motion. Then 

impossible to the enquiry, representations of his friends, the 

assistance of his attendants, this is the usual mode of attack, 

but it sometimes presents itself in a less violent form. 

Having experienced considerable pain in his head, he may 

be affected with sickness of the stomach, vomiting, then
falls down suddenly but recovers immediately, if he be not immediately relieved, by being laid by someone present, or by a hemorrhage from his head or some other part, he will gradually fall into a state of insensibility. It may sometimes be confounded with syncope, by individuals who have never seen the disease, but the marks of distinction are very different.

A person in a fit of apoplexy generally has a convulsed but frequent pulse in the first attack, but afterwards it becomes full and strong, whereas in the other it is rarely perceptible.

During a paroxism of apoplexy, there is interosseous, trembling, as if the patient were in a deep sleep, dulness or slapings of the eye streaming at the mouth, this is generally considered as a fatal symptom, particularly if it be thrown out with considerate violence. The teeth are firmly clenched as if to prevent the administration of any medicines, which however in my opinion
can be dispensed with early or properly, for they can have little or no effect upon the stomach or bowels during the torpid condition of the bowels which a patient labour
under in the first stage of the disease. If a person have a
person have a violent apoplectic fit attended with none of the
most prominent symptoms heat, for laid down, he will
rarely ever recover, but even if his life be preserved, it is impos-
ible he will be affected with incurable palsy, or permanent
imbecility, her memory will partially or totally fail, & many
will be the result. Treatment

The treatment during anfit of apoplectic should be every-
as desirable as soon as a paroxysm comes on. The patient
falls down in a comatose state, his cravat should instant-
tly be loosened, all tight bandages be removed from his
body, he should be moved to a well ventilated cool place.
as soon as possible, should draw as much blood as you can with safety to the patient. The best way would be to draw blood as soon as the patient manifests symptoms of an approaching paroxysm, but generally we are called in after the paroxysm has actually come on. We should then proceed to treat the disease as the exigencies of the occasion require. We should draw blood from the arm or any place that is convenient for the physician to take it from.

Bleeding from the jugular vein is practiced advocated by some, with great earnestness, dividing the temporal artery is adopted also by some, and I think with great propriety, for it is sometimes the case that we cannot get blood to flow from the veins of the arm, we always then should bleed from the artery or jugular veins. It is the practice of the French to rely principally upon expressing and leeching. But that kind
kind of lake warm will fail in five out six cases, it is improper that we cannot rely upon, in all cases of apoplexy, we should draw large quantity of blood, promptly, which we should not be able to do by the expelling of lodging, which should never be adopted alone, in the first stage of the disease, if the practitioner wishes to be successful. Emetics have been prescribed in apoplexy particularly if it be excited by an overdistended stomach. This is a practice pernicious in the extreme. I would as soon give high stimulants in an inflammatory fever, as an emetic in apoplexy, it is one of the signs fatal of the gastric pathological contrary to reasons common sense. It is obvious, that if blood vessels be ruptured in the brain from an accumulation of blood in them, we would by giving an emetic excite the abdominal muscles by that means cause the blood to be impelled forward with considerable violence to the brain, thereby producing the
An Inaugural Dissertation
On Tetanus
Respectfully Submitted to the Inspection
Of The
Provost, Faculty, and Trustees
Of The
University of Md.

By Bazelleel M. Pumphrey
Oct. 1838
To H. D. Sellers, M.D.

Dear Sir,

As a mark of the respect and esteem which I have for you, instilled, by the many acts of kindness manifested to me from you, as a friend and preceptor, respectfully dedicate to you, as a mark of respect and to merit, the following advertisements.

With Anxieties I remain Yours.

B. W. Humphreys
This is a disease, in the Obst. Journals, and
ordered regime, of Cullen, it is generally char-
acterized by a rheumatic rigidity of the
whole body. Some of the most well known
writers have distinguished Ditanic Com-
plaints into the several species of
Dianic, Cystic, Thymic, Empyema, etc.
Cullen had also in his Synopsis, and
the Dianic or hooked jaw of infants as
a grand distinction from the Dianic, but
this is however I judge to be improper, but
should consider them only different de-
grees of the same disease. Ditanic com-
plaints may from certain causes occur
in every climate, they occur most freque-
tly in the warmest climates, I in the
warmest seasons of each climate.
These complaints affect all ages, sexes, and temperaments. Complexions, the cause from whence they commonly proceed, are cold and moisture applied to the surface of the body. While it is known especially the deceit of heat and cold. The effect of a long temperature in hot countries is the first item that ought to be considered in counting for Eritania. We know nothing of this disease in cold latitudes, except what precedes from the idea on the diseases of tropical climates. Although it is occasionally observed in the Middle and Southern latitudes of the United States, the high degree of heat where this disease is to be noticed, usually induces great prostrations from avoiment, with diminished temperature.
of right removes the indicible ability of the day. This is gradual, though sudden under common care, but in the state of indirect prostration, the body becomes suddenly weakened by a check in respiration, under a foul and damp atmosphere, in which the body is convulsed. The body too rapidly, the excitability is of accumulating gradually diminishing, instead of adding to indirect ability, and the whole nervous system depopulated so long that a reaction of the heart cannot succeed. Every other department of life seems to be injured and greatly impaired. The muscles of voluntary motion alone keep not their natural power, but irritability mortally increased. The excitement of the whole system seems to be transformed into these muscles. The skull is agitated.
Disease consists in depriving them of their
underpower, & diffusing it equally over
the three departments. The experience of
the faculty who have been conversant with
the two varieties of tetanus is consonant
to this pathology, however preposterous
May have explained it; and it is known
to require a different treatment. In tuan
matic tetanus, the condition of the Mus-
cle which consists in a spastic rigidity
is occasioned by theviprasis made upon
through the brain. Hence, by almost
effects; but such partial injuries
are very numerous, & occasion a general
disease by different & alleged dangers.
There are probably some of them caused by
this disease, but they are not the Nation.
by known. But Bell, ascertained, & I
have said. This disease attacks all
persons, but shorts frequently the young
And robust in presence to those
of a weaker & more delicate habit, hence
Males more frequently than Females.
But the diseases arise from different
Causes, so of Course the locomotion is
different. According to the Dane, When
from Cold, it commonly comes on in a
few days after the Application of much
Cold, but if it arise from Cold bound
in a lesion of the Nerve, it generally rises
from cold for many days, & sometimes
the paresis is nearly located oppining
the hip-joint, but generally it rises
sometimes comes on suddenly under
a violent degree, but more generally
its accession is gradual. In that Case
it comes on with a sense of stiffness
in the back part of the Neck, which
gradually increases, & denied the
Neck.
The pain of the head, difficult & painful.

As the rigidity comes on & increases, it is commonly at the same time a sense of uneasiness felt about the root of the tongue which by degrees becomes a difficulty of swallowing, and at length an entire interruption of it. While the rigidity of the neck goes on increasing, the pain again, often violent at the lower end of the sternum from hence shooting into the back, where it pain arises. All the muscles of the neck particularly those of the back part of it are immediately affected with pain, pulling the head strongly backwards. At the same time the muscles that rule the lower jaw which upon the first approach of the disease are affected with cold plastic rigidity
One now generally affected with the more violent spotted, let the parts be closely together that they do not admit of the smallest opening. When this takes place, it is called 'locked saw.' Then when the disease has advanced thus far, the great extensor muscles of the back are chiefly implicated, by which the body is being backwards in the form of an arch, resting on the tip of the heels. The disease has received the name of 'opisthotonus,' again when the extensor muscles on the front part of the body, together with the abdominal muscles, are rigidly contracted, drawing the body forwards. It is then called 'emphrathotonus.' Some writers have also made other varieties, as the lateral or pleurathotonus, this in rather the offspring of the fancy, than the result of accurate observation. In this volume
period of the disorder, every muscle of voluntary motion became affected. The eyes are fixed in their sockets; the forehead is drawn into furrows; the whole countenance undergoes the most extraordinary change. The muscles both of the lower parts of the anterior part of the general frame stiffen. The muscles of the abdomen are strongly contracted; the belly feels hard and tender as a board. And finally a violent convulsion puts an end to the life of the patient. The sufferings of the patient are almost beyond human conception. I avoid the ordinary course of a paroxysm, but, of late, less often, I find that there are occasional remissions, in common with the spasm, they undergo, the muscular relaxation, however trifling, and the intervals of ease, but momentary. When the spasm is general of violent, the patient is contracted, hurried, and irregular. The Respiration is limited.
affected, during a remission they both re-
turn to their ordinary state, from the symp-
toms and scarcely met with, even in the lat-
er phases of the complaint. With regard to the treatment of Tetanic Affections, Authors
have divided it into Idiopathic or Symptoms
of Tetanic Arising from Wounds & Heat from
Heat & Cold. It is also much more easily de-
scribed than practiced; Howver, we still
Consider it within the reach of Medical Art.
When Arising from a Wound or the Lesh of
A nerve, I. Collier says the first step is to
Cut off that part from all Communication
with the Centre, and by producing Affliction
on any Substances in the wound they
should be removed, as producing irritation
there will aggravate the Disease. Further
the removal of irritations Cure the Disease
as May also Apply to wounds of a Razor.
Emollient & Kind, the Medical Treatment
is in Allaying irritations. If tranquility
The Nervous Excessibility of the Entire System.

This first be removed by purgation or vomiting, the arrangement of the stomach, when occurring in children, Castor Oil is a very good remedy. When this fails, we then try injections. Opiate may be applied in any variety of the case, when Obstructive Constipation is removed.

The administration of Opium should be prompt in very large doses. Repeated at about two-hour intervals, for the disease will not yield unless sufficiently large doses have destroyed the body in its healthy state, where it arises from chronic perspiration. When Opiate has succeeded, the patient should be kept under its influence, aided by Opium. The Oil of Amber has been of service when all other remedies failed. Mercury, when given in large doses to produce Phlegism is beneficial. When from this it may be combined also with Opium, the Warm Cold Bath are each equally salutary. The Phosphoric Acid has been used in some cases with advantage. After the patient is restored to the frame, the Cold Acid is unjustified to bridge.
An inaugural dissertation

on Tetanus

Submitted to the examination of the

Trustees and Medical professors

of the university of Maryland

On the fifth day of April 1830

For degrees of Doctor of Medicine

By Mahlon C. Rice, of Maryland
Introduction

In deciding on a subject for a dissertation much difficulty presented; the great variety of diseases which are interesting to physicians, have already attracted the attention, and exhausted the ingenuity of other candidates for medical degrees; and independent of these productions, all diseases have been treated of by medical writers of the greatest note; on whose description and mode of practice, I could not have flattered myself with the hope of making any improvement. Then in consequence of it, being a duty imposed upon candidates for degrees in medicine, I proceed to make a few remarks on a disease called or known under the title of tetanus; Altho. I am confident this thesis will not be exempt from inaccuracies, still I shall not be discouraged; as I am in hopes the indulgent reader will make every possible allowance.
On Tetanus, this very painful, and to often fatal disease was well known to the ancients and described by them, to be principally the productions of wounds; since their time we find it described by a variety of authors, under the appellation /Tetanus, Amphistrotonos, Episthetonos, Pleurosthetonos, names expressive rather of the inflexion of the body, than of any material variety with respect to the disease itself.

Altho this disease, may and does occasionally occur in every climate, yet it appears to be chiefly confined to the more southern latitudes, so much so that it has been supposed by some to be endemic in these situations; it is said to be common in the west Indies, and it is likewise not uncommon in the southern and midel parts of the united states.

With respect to the influence of heat on the production of this disease, we will speak more fully hereafter.
This disease is, for the most part, gradual in its attack, discovering itself at first by more or less rigidity of the muscles of the neck; attended with an uneasy sensation about the root of the tongue. These sensations exists in some instances for two or three days without any alarming symptoms; the disease however in other instances comes on more suddenly. In the usual form of the occurrence of this disease, the stiffness of the neck continues to increase, rendering the motion of the head more or less painful and difficult; the painful sensation at the root of the tongue is sometimes very considerably augmented, producing difficulty in swallowing in a greater or less degree; with the continuation and increase of these symptoms the patient becomes affected with a pain at the suboccipital oordis, shooting in many instances towards the back; A nausea and vomiting are frequent symptoms in the commencement of the disease, particular in such cases as arise from cold succeeding heat, these
Symptoms are early of long continuance, at this period of
the disease, the muscles on the anterior part of the neck
and those which move the lower jaw upwards, begin to
be affected, and by degrees becoming more violently,
contracted, closing the teeth in such a manner, as to
render the introduction of anything solid impracticable.
This symptom is called locked jaw; the pain at the bottom
of the sternum now becomes more frequent and fixed,
and is attended with an evident increase of the chills.
The muscles of the spine which were either to unaffected
now begin to contract, and bend the body strongly backwards.
The extensors and flexors of the lower extremity are also
now affected, and contracting simultaneously, render
the legs rigid; in this situation the patient will spring
up, and appear to rest entirely or in a great measure
from his head and heels, although the extensors of the
head and back are generally most affected; yet the
muscles of the anterior part of the trunk and neck
are frequently violently contracted; particular the
null
abdominal; which sometimes becomes so rigid as to afford to the touch the sensation of a piece of wood; in some instances also the muscles on the anterior part of the body becomes so considerably contracted as to counteract completely their antagonists, in such a manner as to preserve the whole body rigidly extended; it is this form of the disease which is more properly called Tetanus. In this state of the disease the muscles of the superior extremity becomes so much opposed as to produce a rigidity of the arms and in some instances clinging of the fists; these spasms are everywhere attended with the most violent pains; the utmost force of spasm is not however constant, for after subsisting for a minute or two; there is always more or less remission of the brutal contraction; though in no instance is it so great as to admit of the action of the antagonising muscles, this remission of the contraction is always productive of a remission of the pains; but neither is of long duration; as the violent contraction and pains are renewed sometimes every ten or fifteen minutes, and that often without any evident exciting cause; in some instances however every attempt to motion as the changing
of position, endeavoring to swallow, or even to speak, will give occasion to a renewal of the spasms; the pulse in general is either full and hard, or small quick and regular; in instances however where the disease has proceeded from cold succeeding to heat, a fever with other marks of inflammatory diathesis are more considerable and is sometimes attended with delirium; the breathing in the most part is short, quick and intermitted; in some cases the heat of the body is increased, while in others it remains perfectly natural. the blood when drawn rarely exhibits the inflammatorybuffs but generally of a looser texture than usual, and does not regulate as when natural, is of a less florid or dark color. it is sometimes covered with dark spots; deglutition is often entirely obstructed, and in most instances bowels are obstinately constive; the secretion of urine is also diminished, and what is discharged is very high colored and deposits much sediment; patients in this disease very rarely becomes delirious to any considerable degree, until towards the close when it proves fatal when every function of the system, mental as well as corporal undergoes the most complete subversion.
from the Repeated and continued Violence of this excruciat-
ing, and dreadful disease. It is perhaps unnecessary to observe, that in this disease the patient is so far from being able to perform any voluntary action, that the influence of the will over the organs of voluntary Motion is completely suspended. Where the disease terminates in death it is generally on some day before the Seventh; but its termination in health is frequently protracted for three or four weeks or more. This generally very gradual, and without any particular Crisis from the very peculiar and striking Symptoms of this disease is little danger of its being confounded with any other. It will therefore be unnecessary to treat of the Diagnosis; for this reason, that all the diseases which possess any Similarity to Tetanus in their appearance are generally of the same nature, and require nearly similar treatment with respect to those who are most subject to this disease. Dr. Cullen has asserted, that altho' it may affect persons of all ages, yet it appears to affect those of the Middle age more frequently than those that are in advance, or the younger, the Male Sex more frequently than the female; and the robust and vigorous more frequently than the weakers.
The frequency of this disease among the negroes in the west indies has been ascribed by some physicians to a superabundance of irritability which it has been imagined the negroes possess, that the negroes do however possess an accumulated irritability is improbable from the following reasons;

First, the do not suffer more frequently than the whites from the great exposure to a hot sun, severe exercise or labour deprivation of Rest &c; nor from the general abuse of what are called the non naturals;

Secondly, unless we can suppose that increased irritability in the muscles ('properly so called) can exist without a considerable degree of it in the muscular fibres of the System of blood vessels; how can we account for the notorious infrequency of fever of every kind amongst them that the are much less disposed to fevers particular to that grade called the yellow fever, is granted on all hands; how can this happen if their irritability be preternatural;

And thirdly, because it is highly probable that the want more frequently suffer than the do from wounds, amputations and the variety of accidents to which the are necessarily exposed, did the possess that superabundance of irritability
Which appears to be so materially concerned in the production of
defence from local injuries, as this appears always to be of a
degree of violence proportioned to the constitutional symptoms
and this last again in a degree proportional to the irritability
existing at the time. These considerations have induced
me to relinquish the opinion, with the respect to
the superabundant irritability, and I would ascribe
the frequent appearance of tetanic amongst the
negroes rather to the more frequent exposure to many
of its causes, to wit, wounds, burns, heat, cold, fatigue
and the like.

Of the predisposing causes, Cold has long been known
to possess considerable agency in the production of tetanus
but in what manner it acts is not however decided.
It is now generally known to be a negative quality,
or of course cannot directly or positively produce any effect
though indirectly it is not infrequently productive of very
many as well hurtful as salutary. In the present instance
I am inclined to adopt the opinion of Dr. Potter, that
as it acts only by producing a state of debility which may
Favour the action of the exciting causes to be hereafter mentioned.

that is its mode of operation differs from, there being nothing in
record of the disease being produced from exposure to cold
without the intervention of some more active agent, as preceding
ing, heat, wounds, stimulants taken internally.

did cold possess any absolute operation in the production
of Tetanus; it certainly would appear more frequently in
Winter than Summer; Severe Exercise of labour as the
produce muscular debility do most certainly predispose to
the present disease; hence we find Tetanus occurring
more frequently from wounds received in battle than
at any other time; Tho’t the do this is also further proved
by the greatest frequency of Cramps in the Muscles of
the thighs, legs &c; after the have been previously weakened
by long walking, Swimming, or the State of Sleep; and that
excessive fatigue, no doubt is the principal cause of the
frequent occurrence of this disease amongst the hand
labouring Ngees of the west indies and the Southern
parts of the united States.
It will surprise some perhaps to find the direct opposite of cold, heat enumerated as one of the predisposing causes of this disease, that heat possesses considerable influence in some way or other in the production of this disease has long been observed and that heat does produce debility, and that of the indirect kind, is too incontestible a fact to need any illustration. To these causes may be added excess in venery, want of rest, excess or a deficiency of aliment, and indeed everything which tends to produce debility; from what has been said it may be inferred, that the debility in this instance does exist particularly in the muscles; from their being almost exclusively affected. And I agree with Dr. Potter in believing this disease consist in an accumulated irritability of the muscles, and a preternatural excitability of the whole system.

Occasional or exciting causes? there are few as we know one, first wounds of every kind, as well as muscular as tendinous, or nervous parts, and particularly such as are made by gun shots; the distance of time from the
Infliction of the wound to the appearance of the disease is extremely various, it having appeared in some instances in two or three days and in others after several weeks has elapsed and the wound had healed; in cases of the last kind the appearance of this disease when it was not to be suspected, has been attributed by Dr. Rush to the retention of acrid particles in the wounded part.

The cutting of the umbilical cord with dull instruments is accused of frequently producing that form of the disease called Trismus Napeulentum, by the practitioners of warm climates; Burns not unfrequently produce Tetanus.

Secondly, in compliance with custom I shall here mention Cold, as an occasional cause of Tetanus. That the disease has in many instances very suddenly appeared after improper exposure to cold is not to be controverted; it is also equally incontestable that cold never produces Tetanus by a direct or positive operation; but I would rather ascribe the origin of the disease in these instances to the sudden diminution of the excitement and the immediate predisposition.
Thereby induced to convulsive and inordinate actions upon
the impression of almost any stimulus, may not the muscles
in these instances fall into convulsive or wrong action,
from the influence of what Mr. Hunter has called the
stimulus of imperfection; as sudden and copious depilation
in some instances produce convulsions; it is only on some
such a principal as this, that the effect from the applica-
tion of cold can be explained.

Thirdly, heat is also supposed by many to be a frequent
occasional cause of tetanus.

Fourthly, terror is enumerated by Dr. Rush amongst the
exciting causes of this disease.

Fifthly, tetanus is supposed to be frequently induced
in infants, by acrid matter in the intestines, particular by
the retained meconium;

Sixthly, it has been induced by drawing of teeth.

Seventhly, it has been in several instances the consequence
of eating the narcotic vegetables, particular the hemlock
and the stramonium.
Eightyfifth. It has been the consequence of the bite of some of our poisonous Serpents;

Ninetyfifth. It has been in some instances the effect of Parturition.

One hundredth. It has sometimes appeared as symptoms of Hysteria.

Elevenfith and lastly, as symptoms of bilious fever, gout, and hydrophobia; to these we may also add ardent Spirits. Wash Miasmatum, or indeed Stimulants of any kind,

A consideration of the effects of most of the above causes will convince us that the prove injurious, in consequence of Stimulant operation consequentially determined to certain parts from their greater disposition to receive impression; this unequal determination unquestionably exists in the muscles in the present disease: as we may infer from their being principally affected; having more considered every circumstance essentially pertaining to the History of Tetanus; I shall before I attend to its Cure, briefly attempt its pathology, prognosis, and prophylaxis.

In attempting the investigation of the pathology of Tetanus am fully apprised of the difficulty which involves the
...
Subjects and of the little assistance to be derived from the present imperfect state of our knowledge with respect to the pathology of muscular affections.

To relinquish an enquiry, however, on account of its apparent intricacy would be equally unphilosophical and unfriendly to the extension of Science.

In the first place then we may observe, that the disease consists of an uniform spasmatic contraction of the muscles either partial or general throughout the body, which therefore producing the phenomenon of the disease, we shall call its proximate cause; this spasmodic contraction of the muscles is of the kind called by pathologists tonic or fixed in contradistinction to those called clonic spasms. The last alternating with relaxation and constituting what are called convulsions.

In explanation of the peculiar Modus operandi of the exciting causes, in the production of this disease, has long been held as one of the desiderata of Medical Science, and although the physicians of the present day have

a remarkable manner discovered an attachment
Und fondness for the pathological enquiry and speculation, it there are very few who have attempted an explanation of this curious problem. It is likely that a more accurate attention to diseases will discover that the mode of action is the same, let it be where it will—irregular, wrong, convulsive action; and we would be led to explain the difference of the disease rather upon some circumstance property peculiar to the part affected, than upon supposition of there being absolutely any specific variety of the same diseased action; as appearing in different parts as bone, muscle, artery, &c. 

Be this as it may, we well know that the same stimuli which produces tetanus, do very frequently produce convulsive or inordinate actions of the arteries, or fever; when the are aided by arterial vibrability or irritability, and I cannot think that it is going to far to suppose that the same causes applied to the body labouring under increased muscular irritability, or predisposition, will produce irregular, inordinate, or convulsive actions.
In the muscles, and in fact the disease in question, these are
further warranted in believing, since in each instance
these stimuli act upon matter of the same nature
Muscular fibres.
I am well aware that it may be asked, how I explain
the manner in which these causes come to act particularly
in the muscles; and this I would explain upon their
rise being at the time a greater susceptibility of injury
than any other part of the body.
With respect to the application of these exciting causes
is whether the must be locally applied to produce a disease
in a particular part; I cannot determine. I am
however inclined to believe that most hurtful agents
produce their effects by a general operation on the
whole system; and that the exclusive of either arteries
nerves, or muscles is to be explained upon the existence
of increased irritability.
In forming a prognosis of tetanus we are to be guided
first by the causes which produced it; Secondly, by the
violence with which it attacks; Thirdly, by the length
[Handwritten text not legible]
time which it has existed; and Fourthly, and lastly by
the situation of the patient at the time present,
first, those cases which arise from wounds are generally more
fatal than those from any other cause.
Second, the disease is generally fatal in proportion to the
rapidity of its attacks; Third, those cases are
favourable when the disease is protracted beyond the
fifth day, altho' there are some instances of its fatality
after the tenth; Fourth Cold extremities and
Clammy Moist sweat are generally supposed to
portend death; whereas a fever with a white tongue
and a plentiful discharge of urine are thought to
foretell a favourable issue.

Prophylaxis; there are very few diseases perhaps
so Certainly prevented in their forming State as Tetanus.
and to this period of the disease we should be particularly
attentive, as most of the causes productive of Tetanus
are more frequently productive of other diseases than
of it; So we find little said, or indeed little could be said
with respect to the use of any prophylactic Remedies.
Between the applications of the exciting causes and the beginning of the disease, as most of these are generally so very obscure in their operations, as to render this last, insensible to us, until the are about to induce the disease.

This obscurity however very happily for mankind does not exist, with respect to one of the most frequent and dangerous causes of this disease; viz. wounds, however it may be explained, it is the undeniable Result of experience that this disease is most frequently the consignance of Such wounds as have healed, without the intervention of Much inflammation; and it is equally true on the other hand, that a Considerable inflammation in them Either natural or artificial, is one of the Surest preventatives of Tetanus, in Such wounds therefore as we have any reason to Suspect will produce tetanic affections; we Should Resort to Such Measures as will Excite inflammation and Supuration; As we in Never act with propriety in doing any Thing with the intention of preventing Tetanus from its other Causes before we perceive some of its Symptoms we are
To be particularly attentive to those which may be called the precursors of the disease, viz., pain and stiffness of the neck and jaws, a disagreeable sensation at the root of the tongue; and starting from sleep; whenever these symptoms occur the disease may be almost uniformly prevented by the use of opium and other stimulants, bark, wine, &c., and by the application of acrid stimulants, or what I would prefer, Caustics to the wound or hurt where it proceeds from that cause.

Having said as much with respect to the preventative experience and reasoning on the subject will justify us proceeding to the treatment of the disease after complete formation.

Cereb the indication of cure are first, to lessen or abstract the irregular and diseased excitement of the muscles by first, Bloodletting, Second, Ametics, and Third, by purgatives. Secondly, after sufficient depletion to remove or overcome the diseased action by Tonics. Remedies, there are first opium, Second, bark, third, wine, fourth, oil of amber, fifth, cold and warm bath, Sixth
Mercy, of each of which I shall speak in the order in which they are mentioned; and first of Bloodletting.

The use of Evacuations in Spasmodic affections is by no means of Modern invention, as we find them mentioned by Several of the ancient writers as being essentially necessary in all cases of Spasm not immediately, depending on inanition; although most of the modern practitioners have precluded the employment of bloodletting in Tetanus; there are never the less some who have used it in particular instances, and there are at wanting facts to establish its propriety: had the winds nothing from experience to recommend it, it would yet be worthy of a trial, as being manifestly serviceable in diseases of this kind; and there are very few as far as I know who accuses it of being injurious.

I conceive the propriety of bloodletting as a remedy in this disease proved by the following circumstance: first, the pulse is frequently very full and hard
by the relief, which it affords in other instances of Spasms, 
in the Spasmodic contraction of the bowels in Colic, 
and in Spasms attendant on Hysteria; third, by its 
known effect in producing general Relaxation, 
is exemplified in Syncope, and in facilitating 
the reduction of luxations and fractures. 

by the blood bearing the appearance of athologic 
liathesis, I therefore think it should be employed in 
the first instance in all cases where there was not 
so much arterial debility as to forbid it. 

Emetics, is proper in all cases where the disease 
has arisen from Narcotics, being taken into the 
Stomach, likewise Emetics acts as a sedative 
and equalizes the Excitation. 
Purgatives, in this disease are generally highly 
Indicated, as the patient is generally Costive, 
Dr. Buckler, conceives the disease most generally 
Excited into action in consequence of a derangement
The intestinal canals, therefore, we should, resort to the most active cathartics and likewise injections. This remedy has been more generally used and stalled in tetanus than any other. So much so, indeed, that many have depended entirely on it for a cure. Although it has been so universally recommended, there are many proofs of its inefficacy. To obtain the greatest benefit from this remedy we might very advantageously or bloodletting previously to its exhibition; in this manner by lessening the excitement we enable the opinion to more easily to institute its own action. It should be given freely, and repeated as often as the violence of the disease might require, perhaps from the known transitory stimulant effects of this medicine. We would derive more benefit from it when combined with some more durable stimulants, and give it in conjunction with Madaura, lime, as Dr. Buckler.
as recommended, opium has been also used in the
form of plasters. Either to the jaws or feet, to advantage.
Addition to these methods we may also exhibit it very
advantageously in the form of cinna, with this difference
never that in this way it is to be used in a double
perhaps in a greater quantity. In cases of wounds
that probably may produce Tetanus, Dr. Baker
commands the use of opium in such quantities
will keep the system completely under its influence
long as there is any danger.

nes as a powerful diffusible and somewhat durable stimulus
may be properly used, and in considerable quantities,
Kosack, relates several cases, who he administered wine
a large amount in Tetanus, unaided by any other medicine.
I obtained the happiest results.

Oil of Amberly this medicine has been highly recommended
Some practitioners, and supposed to have its action
principally upon the muscular system; Dr. Potter, advises
his article to be given in large doses from 3 s. to 3 l.
Old Bath. This remedy has been highly spoken of
especially by Dr. Currie, he says it allays the violent
action of the heart and arteries, and soothes the system of
sensation, it reduces the pulse in frequency, moderates and
equalizes vascular action, relaxes the muscular fibre, and
removes rigidity; likewise dispersions the organs of
respiration; yet I think it should be cautiously employed
in cases where there is much debility.

Novm Bathing, this Remedy has been much extolled by
some practitioners, but I think it should never be employed
except in cases of very weak action, and should be incited
by friction with dry flannel.

Mercury; when we consider the operation of this
Remedy, as a very general and powerful Stimulant
acting particularly however on the arterial and
lymphatic systems; its propriety in that state of
this disease in which incitants are to be used will be
at once admitted; although the use of Mercury in the
present disease has been strongly condemned by some;
yet there are not wanting facts to prove its utility,
and I have only to lament that it is so often
difficult to excite a Salivation; that the disease
frequently terminates before this effect can be produced.
I would therefore in every instance have immediate
recourse to mercury in conjunction with other remidies
to be introduced by the mouth or skin in such
quantities as to effect the gums as speedily as
practicable; and if it proceed from a wound apply
warm cataplasm to the part.

Might not masticating with corrosive sublimation be of
service, this mode of exhibiting this medicine has
been found very speedy in producing ptosis.
Conscripti, ut non tibi sit impediendum inclusum

...
An Inaugural Dissertation,

On Acute Gastritis.

Submitted to the examinations

of the Regents, and Medical Professors,

of the University of Maryland.

For the Degree of Doctor of Medicine,

By John Gunby.

March 26th, 1850
To Nathaniel Ry. Smith, M.D.

whose superior genius,

and highly cultivated understanding,

is equaled only by

His exemplary moral character.

This Dissertation is

Respectfully dedicated

By his friend and

Humble Servant

John Gunby.
Acute Gastritis.
When we enquire into the relative situation and functions of the Stomach, its numerous train of sympathies and consequently, its liability to diseases both idiopathic and symptomatic; we cannot fail to be convinced of the magnitude of its importance in the animal economy; and the Practitioner of Medicine, who should fail to give it that investigation, which his Profession imperiously demands of him, is justly chargeable with gross neglect, and unworthy of the well earned reputation of his more indefatigable Brethren, and the confidence of his patient.

In entering upon a description of the diseases of this viscus, it will not accord with my present design to take an extensive view of the subject, were my capacity commensurate with their importance; and should consider, the brief remarks I have to make totally inexcusable, if time and circumstance would permit a full discussion of them.

In commencing this subject I have thought it necessary to mention the function of the Stomach in health, a
knowledge of which frequently enables, or at least assists us, in detecting the disease. The anatomy I have deemed altogether unnecessary to insert: therefore shall proceed to its functions. The general points of which, almost all Physiologists agree; namely, that it is a receptacle for the food, after having undergone the process of mastication; for the purpose of undergoing, by far the more important change, necessary for the nutrition and growth of the body. The manner of accomplishing this however has given rise to numerous opinions. It was believed by the farther of our science that the food was subjected to a putrefactive process, which they expressed, by the term concoction, and which I think is now seen to be entirely hypothetical. And more recently, that the stomach acted mechanically, by a forcible contraction of its muscular fibres; its walls were made to approximate to each other, and by a species of triturating, it effected a minute division of its contents. But when we consider the
Transcription: 

... (Handwritten text continues)
weakness of the muscular fibres of the stomach, and the membranous nature of its coats, it will appear that the general action is slow, regular and by no means a forcible contraction; not an apparatus for triturating the food, but nearly giving motion to its contents. The next opinion, and the last, that will claim my attention at present is, that the food is dissolved by a fluid which is a peculiar secretion of this organ (namely the Gastric Juice). And is believed flows from the extreme arteries of the villous coat in general, and partly from the mucous cryptae and ducts when pure it is a paludic mucilaginous liquor a little salt and brackish to the taste, like most other secretions having the power of retarding putrefaction and dissolving the food. The Gastric Juice now acting upon the fluid mass, after mastication, and mixing with the saliva, will dissolve the digestable, and entering into combination with it, will produce a new fluid,
called chyme. In taking a view then of the healthy actions of this organ, it would seem, that the food is sent down into the oesophagus by a succession of actions, preceded by a perfect relaxation, and when the food arrives at the superior orifice of the stomach by the same relaxation, preceding the contraction, the muscular fibres of the upper part of the stomach yield, and receive the food compressed by the oesophagus. And when the process of digestion has been performed, and the stomach being stimulated by its fulness, and more still, by a peculiar irritation of the food, to which it is natural to suppose it is adapted, the muscular coat is brought into action, and the contents delivered into the duodenum.

Having considered this part of my subject in a very brief manner, I proceed to the consideration of the disease, which has been divided into an inflammation of the acute and chronic kind; and to the
former of these I shall principally confine my remarks. And shall consider in order its Causes, Symptoms, Treatment, and Terminations.

In considering the causes of Gastritis it is proper first to remark, that those are more predisposed to the disease, who are of a sanguine and plethoric habit, and indulge freely in the use of fermented liquors. And those also who bring into life a peculiar predisposition to the disease, and are liable to have it excited from the slightest causes.

The causes of this disease I propose to divide into those that are external and those that are internal. Among the external are blows received on the region of the Stomach, or wounds in the Stomach, or neighbouring parts. The pressure of the Ensiform Cartilage, when it is dislocated or broken so that it presses on the Stomach, may excite this disease. The sudden application of Cold to the surface
by diminishing perspiration too suddenly, and by exposure to a low and damp atmosphere. Also by getting the feet wet. Among the internal may be enumerated cold water swallowed, while the body is in a state of free perspiration; likewise by taking in food of an improper nature; by potations of Spirituous Liquors; by over dilution of the Stomach by food and drink; by suppression of habitual discharges, and by expelled Exanthemata and Gout. It is also produced by inflammation of the Liver, and other neighbouring viscera, extending to the Stomach. From acid poisons, and mineral acids, and by swallowing in large quantities, Corrosive Sublimate, Aconite, Tartar Emetic, and Acetate of Lead.

The symptoms of Gastritis, are far from being complicated, and I think may readily be distinguished from inflammation of the neighbouring viscera. The pain in the Stomach is extremely acute, lancinating, and
accompanied with a sense of burning heat. It is not always confined to the region of this organ, but sometimes extends as low as the false ribs, and often shoots to the back. Frequent vomiting, particularly on swallowing fluids. The pain is generally increased, by receiving anything into the stomach, and always by the slightest external pressure. Attended with constipation and fever, with a small hard, frequent, and depressed pulse; sometimes intermitting. And a fact that should claim our particular attention, mentioned by Professor Potter, and not noticed by any writer upon this subject, that the Pulse when the inner coats of the stomach are affected is low and depressed; but when the inflammation travels to the external or Berteinal coat it gradually rises, and vice versa; a circumstance which should assist us very much in discriminating as to the precise seat of the disease. There is also
urgent desire for cold drink, and after receiving it into the stomach, the pain often seems for a time to abate; the fluid however is soon rejected and the patient finds no relief obtained from drinking it. The depression of strength in this disease is most sudden and general, than in any other inflammation. Syncope, sometimes occurs, with a sensation of anxiety, and anguish, referred to the precordia. To distinguish between this disease and spasm and flatulent pains of this organ, we shall perceive in the latter the pulse is generally natural or nearly so; nor are they accompanied with the sudden sinking of strength that attends Gastritis. Vomiting is very rarely so constant, nor is it so often excited by ingesta. Bocce is also a less constant symptom; nor is pain increased so sensibly on receiving any thing into the stomach; nor is there any pain on pressure, which I think is one
of the best diagnosticks of Gastritis, In cramp the skin is
cool and moist, in Gastritis it is hot and dry. There
is however another disease, between which it is more
difficult to distinguish; I allude to an inflammation in
the epigastric mussels; and in order to give a better
illustration: I propose to insert the following extract from
an enlightened author: "The pain, as in Gastritis indeed
is increased on pressure; but it is also increased, and
in a greater degree, by the motions in which the epigastric
mussels are called into action, which is not the case
in Gastritis. The state of pulse in the former is very
different. If affected at all instead of being small and
feeble as in Gastritis, it is strong as in most other
Phlegmasia. Besides there is little or no tendency
to vomit in this case, and some degree of swelling
of the muscles may be frequently observed; this
symptom however is not constant, and there is often
some fulness about the Stomach in Gastritis."
Having thus far given some of the most important of the symptoms and diagnostics of this disease I proceed in the next place to the treatment, which nearly resolves itself into that great antagonist to all inflammations; Bloodletting. And must be carried to greater extent in this form of inflammation than for hapas any other. It is also to be resorted to under quite different circumstances; for in most other inflammations we generally find a strong and hard pulse, and then our object must be, to bleed until we reduce it. But in Gastrites, we will find a low and depressed pulse, which after bleeding will rise, and it is only as this effect is produced, that it gives relief. And so far from only letting blood when the pulse is full and strong, the smaller and weaker it is, provided the disease is idiotic, copious and early bloodletting becomes the more necessary. As soon therefore as the symptoms present themselves, recourse must be had to this remedy, and
if they do not speedily yield, it must be carried to as
great an extent as the peculiar habit of the Patient
will permit. It frequently happens, that the sym-
ptoms of Gastritis entirely disappear, after a large
quantity of Blood has been suddenly taken away:
it will be necessary then, to be prepared for a
recurrence of the disease; which to a greater or
less extent generally happens; a repetition of
Blood-letting then, should claim our immediate
attention. And the less remission the symptoms
suffer, after the first Blood-letting, it must be re-
peated the oftener, and to the greater extent. I would
suggest as a general rule for the application of this
remedy in this case, that the Blood should be drawn through
a small orifice, a small quantity at a time, and frequently
repeated. Having said thus much in approbation of Blood
letting, I shall proceed to mention some other remedies,
which are only to be considered as auxiliary. As it would
be improper in this stage of the disease, in consequence of 
the extreme irritability of the Stomach to give medicines by 
the mouth; we should solicit evacuations from the bowels 
by Enema; which while they expel the contents of the 
lower Bowels, tend by sympathy to increase the 
peristaltic motion of the Alimentary canal. If 
however in consequence of peculiar circumstances, 
it should be necessary, to give cathartics, I would 
recommend to employ Calomel in large doses; for 
in this case it would be reasonable to infer, that 
in consequence of the specific gravity of this medicine 
all would not be expelled by vomiting. Bell 
Saline and Antimonial medicines, should be 
particularly avoided, as they would serve only 
to increase the disease. The drinks should be tepid, 
and of a mucilaginous nature. After general bleeding, 
Topical bleeding, by means of Leeches over the Stomach 
or Scarifying and Cupping may be adopted. And after
the hardness of the Pulse, has been removed by the plan proposed, Blisters may next be applied, and to be of service should be made large, so as to cover a considerable extent over the region of the Stomach: and the cure may be assisted by fomentations over the Abdomen.

In this stage of the disease, the warm Bath and Pediluvia may be used to great advantage; particularly if the skin is hot and dry. As mild emetics the Sweet oil and Olive oil has been employed with great benefit. After the violence of pain and frequency of vomiting are somewhat abated, we may then administer anodyne Enemias.

When this disease has been excited by taking into the Stomach acrid Poisons, it should be our object to ascertain its nature, and employ its antidote as soon as possible. If Corrosive Sublimate, or Arsenic, has been swallowed, we should administer Albumen. When caused by Tartar Emetic, we should give a decoction of Cinchona.
...
When by Acetate of Lead, we should give the Sulphate
of Magnesia. At the same time cause the Patient to
take frequent and small draughts of some mild
diluent drink, such as Chicken Broth, Linseed tea
Barley water, in which may be dissolved a small
portion of Gum Aracbic. Adapting our treatment in
such cases in conformity to the principles, and according
to symptoms, as from other causes.
When our remedies have had their desired effect this
disease will terminate in Resolution, the pulse
becoming more soft and full, about the seventh day,
and diminished in frequency; the pain gradually ceasing
the Patient is restored to perfect health. But unfor-
tunately this is not the happy termination of
every case. In some instances it will terminate in supp
suration, and may be known by the symptoms all the
moderate, will remain, for a considerable time, and
by a remission of the pain occurring whilst their
remains a sense of weight and anxiety. And on the formation of an abscess, hectic fever and night sweats supervene, and these at length prove fatal, unless the pus is thrown up by vomiting and the ulcer heals.

When the violence of the symptoms have not yielded to proper remedies early in the disease, and when there occurs a sudden cessation of pain, the pulse continuing its frequency, but becoming weaker, with delirium and other marks of debility ensuing, we may reasonably conclude, the disease has terminated in Gangrene, and consequently in Mortification.
An Inaugural Dissertation
On
Cynanche Trachealis

Submitted to the examination
of the
Provost, Regents, and
Professors of the
University of Maryland
for the degree of
Doctor of Medicine
by
John A. Sedwick
of Calvert County, Maryland
1830
Cynanche Trachealis

This disease has usually been divided into the varieties, the inflammatory and spasmodic, but it seems doubtful whether the last variety has ever existed, although it has many advocates, but the most enlightened of the profession appear now to be agreed as to its pathology and the general plan of treatment to be pursued, pining it alone as an inflammatory disease. I am satisfied in these remarks by the illustrious Professor of the Practice of Physick in this Institution. Adhering therefore to the opinion of its inflammatory nature, I shall commence with its cause, symptoms, treatment.

It is said like most other inflammatory affections to be produced by cold, it is therefore most prevalent in winter and spring, it occurs however at all seasons when there is variability of temperature, and it is a very frequent disease in August and September, when the days are warm and the nights cool, it is sometimes
produced by metastasis of Scur & Rheumatism. It frequently follows close upon Cataract, Mealect, hooping cough, and any other disease that has debilitated the powers of the lungs, for as has been observed that phthise tends to prehend or produce any degree of irritation in the lungs so as to occasion a hypertrophic position into that organ may be considered as a predisposing cause of ecmph. Children who have once had an attack of ecmph are liable to have it recur on the application of very slight cause, a common attack, will in such constitution be often attended by ecchympyrmptoms until the thirteenth or fourteenth year of life. There appears to be in some families a hereditary predisposition to this disease, and in them it is always more easily excited, this predisposition may be sometimes cut ground, and it may also be destroyed by the occurrence of some disease, as Mealect &c. It has been said by some that this disease is peculiar to children, scarcely if ever occurring
in adults, but though it be admitted that children are more liable to it, yet there are sufficient instances of instances to warrant us in the opinion that it attacks adults also, and in these is always highly inflammatory.

The disease sometimes comes on quite insidious, commencing with catarrhal symptoms, the inflammation proceeding from the Schneiderian membrane to the trachea. In other cases, it is ushered in by a chill and then is more violent, requiring more prompt and energetic treatment, for its cure.

It consists of various degrees of action from a mere local affection, attended with little, if any, general fever, to one of a highly acute kind, attended with severe very inflammatory. Where it is a mere local affection without the general system being much involved, an antiseptic pill of itself frequently
acutet it, but when very inflammatory the whole force of the anti-phlegmatic plan is required for its removal. It has been said that the disease consists in an inflammation of the mucous membrane of the trachea, but the inflammation is not confined to the trachea alone, it may involve the neighbouring parts; it may even extend through the ramifications of the bronchies, and it may involve the lungs also producing Catarrhal suffocations or Phlegmonia.

This disease may attack with or without a chill as was before stated, but in its most ordinary form it is attended with fever of Syphilitic type, teneo pulse, a peculiar continuous cough, by which alone it may be frequently recognized. Difficulty of breathing, dry skin, restlessness and other symptoms of inflammatory fever pains &c.

It is sometimes very rapid in its progress and ill
frequently when left to itself terminate fatally in twenty four or forty five hours. Death is produced in this way, viz. from suffocation and the extent of the inflammation.

Mr. Cullen seems to think that suffocation is produced by a spasm of the muscles of the glottis, though, he says, it may sometimes depend upon a quantity of matter filling the bronchus.

It is probable that suffocation is always produced in the manner last mentioned, and that it never is by a spasm of the muscles. Professor Potter's opinion is that a complete closure of the trachea can never be produced by them.

The inflammation says the Professor, sometimes extends from the lining of the trachea to the muscles surrounding the glottis, and in other cases, it commences in those muscles and travels downwards, but the situation and office of all muscles is such that they cannot can close the
papage into the windpipe. When in a state of
inflammation an irritating cause acts upon
the muscles, great pain and tension are excited,
but they are so completely antagonized that
they cannot close the papage." It is probable then that suppuration is always produced
by the membranes like production which
is generally found lining the trachea in
fatal cases of the disease.

This membrane is now I believe generally
understood to be a secretion from the in-
flamed papage. It has been seen extending
from the trachea throughout the ramifications
of the bronchus, it is very tenacious and
very analogous to the fibrin of the blood.

This membrane is not formed in every case of
the disease — the action of the papage may
be too high and also too low for it. Sec-
tion offers to take place only within a certain
range of action, and I believe that in very
mild and many inflammatory cases of the disease
no membrane is formed, and in many dissections we find the pupils injected with blood only.

The disease may arise from the inflammation involving other parts, from its extending to the lungs, and I think it has been said it may extend to the brain.

As the principal indication in the treatment of this disease is to publish inflammation, so the first and most important remedy that presents itself to the notice of the Physician is general bloodletting. Unless we see the patient very early in the disease this should be the first remedy employed and it is seldom that the patient is seen so early that it can be safely dispensed with. Even in the forming stage it would in general be the safest practice to employ bloodletting, though it may not be necessary to carry it to the same extent.
ar when the disease is fully developed. In some very mild cases, when there is little or no fever, or in the very commencement before the general system is much implicated, for sometimes it appears to be entirely local in the first instance, the laxity might not probably be very imperfectly demanded, and the cure might frequently be effected by an emetic and other remedies, but even in these instances I should deem it the safer plan to bleed, particularly if the patient should be robust and pliant, and there is much difficulty of breathing. As the inflammation is seated in a part very essential to life, and the danger generally present, the bleed should be very prompt in our remedial measures. With regard to the quantity of blood to be drawn, it is difficult, may impossible, to lay down any certain and invariable rule, for it must be
varies according to the age of the patient, his habit, the severity of the symptoms, and the length of time they have lasted. Perhaps in very inflammatory cases it would be a good rule to bleed in the first instance; at delirium animi, as by this means a more sudden and powerful impression would be made upon the diseased, and first regard to the repetition of the remedy; the only rule is the suddenness of the present symptoms. Not unfrequently, after one full bleeding all the dangerous symptoms will subside, and the patient, who before seemed every moment about to suffocate, will now breathe quite easy and appear nearly restored to health. Although the symptoms should at this suddenly abate, however, these by no means to consider the patient as entirely out of danger, for after all these promptings appear, these they may sometimes return into their former violence. We should therefore
in the management of this disease, be always on the alert, and be ready to make use of any remedies the moment they are indicated. Objections have been made to the free use of the lancet in children, but the blood drawn in this disease is generally purgy as in other inflammatory affections.

Sweats have been held in high repute by most praktic upon this disease, and they seem to be particularly beneficial, besides the benefit arising from the evacuation of offensive matter from the stomach, they are very useful in facilitating perspiration which few know how to of the greatest importance. They contribute very powerfully also to the removal of inflammation by diminishing the action of the heart and arteries, and by their tendency to restore to the system, health, repels their natural functions. In very inflammatory cases their
men should be always preceded by the lanent, their use seems to be particular ly adapted to the incipient stage of the disease, or to very mild cases, they will sometimes of themselves effect a cure. There is some preference in the choice of emetics; those ought to be chosen which produce most relaxation and have the greatest influence upon the heart's action — for these reasons the tincture of antimony + potal is preferable to all others, when given in combination with camphor according to Prof. Potter its relaxing effects are much more powerful. It is all important that full vomiting should be produced. The stomach is so insensible sometimes that the ordinary emetics even in very large doses fail to operate — under such circumstances the corrosive sub limate has been recommended as a demul-
accit, and in some cases has been used
with great advantage. The repetition of
flomistis in cystitis. Rachiti is to be repre-
sented by the circumstances of the case, no
definite directions can be given.

Colonel is a medicine which is almost
indefeasible in the treatment of this disease.
It is recommended very highly by some Eu-
ropean practitioners, particularly Dr. Anderson
and Hamilton of Edinburgh, the latter
of these gentlemen has probably used it to
greater extent than any other practitioner, as
he says, with general success. In our
own country it is also highly thought of Dr.
Rush, and is freely in combination with con-

Dr. Rush also placed great confidence in
this remedy, in that species of cystit which
he calls the hemia, Dr. Staints of Albany
is an advocate for very large doses of Colonel
in the very commencement of the disease
be gone from 15 to 20 ye to achile from 2 to 5 ye old at once, it generally produces copious he
more and at the same cathartic. The relaxation
produced by large dose of calomel is great & it is
probable in this way its does most good. Dr
Paul supposed that it acted by increasing the
secretion of mucus in the feac, celesphage, the-
mach and bowels, and thereby thickening the
epithel of it in the trachea. There is not
much to be feared from salivation in the feed
use of calomel.

After sufficient bloodletting the best practice
is to give calomel & tarteriform in combina-
tion till full promoting is produced and after to
continue the calomel in considerable doses
in conjunction with other remedies that may be
indicated until all danger shall have passed away.

Gastritis may be of some use but no
reliance can be placed upon them.

Blister seem to be of doubtful application
they might be used where it was a mere local affecta-
in inflammatory cases in the first stop they should
permission, if they should be used at all, the inflammatory symptoms should be nearly subdued. The
warm bath has been recommended, if it appear to be in-
appropriate in the first stage before inflammatory action is
subdued, but in the second stage it may be very benefi-
cial. The Eau Boute has of late been resorted
upon by Dr. Hardee of St. Petersburg and is stated
with success. The Senna has been highly recom-
manded in this disease. But it appear too stimulating for
the first or inflammatory stage; after the has been
subdued one then is a dry hoarse cough, dry skin,
and oppressed respiration, it would be very useful,
and also in cases where it appears to be a more
local affection — this together with many other reme-
dies that have been prepared on to be looked upon as
more advantageous.

The Lacet, Tartarized Antimony, and Salome,
are the principal remedies that are required, and
perhaps by them judicious application nearly every
case might be cured, it is inflammation which
is the great antagonist from here to contend with it
it is by these means only that one can subdue it.

Tracheotomy has been advised as a last resort in this
disease, but it has now I believe been abandoned by
many prac. physicians.
An Inaugural Dissertation

on

Lynanche Trachealis

Submitted to the Trustees and Medical Faculty of the University of Maryland on the 5th of April, 1830 for the Degree of Doctor of Medicine by

Wm. Williams

of Maryland
To the examination of the trustees, and Medical Faculty of the University of Maryland, this hasty production of a few days reflection is with diffidence respectfully submitted.

Wm. P. Willing
Cynanche Trachealis.

This is a disease of a highly inflammatory nature, commencing in the mucous membrane of the trachea, lungs, & extending in many instances to the minute bronchial ramifications, producing a peculiar secretion, which assumes a membranous form lining the trachea, & not unfrequently the whole bronchial surface, the largest part of the tube being always first affected. This effusion, when subjected to chemical analysis, appears to consist chiefly of coagulable lymph, in combination with that peculiar substance of the blood called fibrin; from the nature of which the membrane like appearance can readily be accounted for, & by what means says I, good the mucous secretion,
throw forth this peculiar effusion on this peculiar occasion we know not." I think however it may be accounted for. The inflammation in lung is certainly of a very singular nature, were it like that usually affecting the mucous surfaces of these parts, we should have the same kind of membranous substance resulting from catarhal inflammation every day. A common cold extending to the trachea or bronchi would most probably terminate in this sort of effusion. The material difference in the nature of this affection cannot I conceive be the result of a higher degree of inflammation, nor in the peculiarity of mode of action in the same system of vessels, whose office it is to perform similar functions; their structure & modes of action must be the same & when affected by Disease, must give similar results, differing only in the degree of inflammatory action, &
never terminate in secretions so dissimilar as those met with in Group & common inflammations of these parts. Will not this difficulty be considerably removed by locating the morbid actions constituting them in different structures? that of catarrh having its seat in the mucous follicles, & glands, & the group in an inflammatory affection of the exhalent arteries opening up on the mucous surface? This hypothesis I think is fortified by the analogy this excitation bears to that deposition from inflammations of other internal membranes, first described by Hunter. Group has been divided by some into two species; viz, Diaphatic when the disease is primarily and extensively seated in the bronchiae, & trachea, & Symptomatic when it appears as the consequence of some previous disease, such as measles, scarletina, or Gm ancha malignant. Gm ancha trachea is certainly always an original Disease & can
not I suppose be produced by the irregularities of any other disease. The distinction into inflammatory & spasmodic is in my opinion very objectionable; as it might lead practitioners in many instances into a very injudicious mode of treatment. It seems to me extremely doubtful if an admixture such a spasmodic disease to exist, that it can be the cause of death even granting for a moment that the latter can be accurately close by the action of the muscles proper to it. Is it not impossible for a spasm in any part of the body to be maintained during the sinking powers of the system, which must inevitably take place as soon as the spasmodic action impedes the process of respiration? An approximation to death from such a cause must, I conceive, be one of the best antispasmodics; this convulsive action must yield before death takes place, consequently must fail short of producing so unfavourable a result.

The cough seldom affects infants till after they are weaned, after this period, says Dr. Cullen the younger, they are, the
now they are liable to it; the frequency of it becomes less as children become more advanced. There are no instances, however, of this disease affecting persons above 12 years of age.

This, however, does not agree with the experience of other physicians; I have myself witnessed a case of this description, which was violent, cured only by the energetic use of the hottest calomel; and in particular, the patient was for a long time after subject to slight attacks from imprudent exposure to cold. The application of cold seems to be the general cause which produces it, hence it occurs more frequently in the winter and spring seasons when the weather situations of weather are great. Cold and damp situations are also favourable to its production; it seems however peculiar to some families, or this liability to affect particular persons or families. I can only account for it by supposing that there exist in them an original debility of the mucous membrane of the trachea, which yields more readily to the causes producing croup, or might be called a predisposition; it is also by supposing a debili
stated state to remain after the first incursion of the disease, that I can account for the great tendency it has to return in the same subject; this susceptibility however gradually wears off as they grow older.

The symptoms of this disease are not always obvious in its forming stage, a day or two previous to an attack the child shows a disposition to be inattentive and fretful; the eyes are heavy, and there is usually a slight cough and hoarseness, from which symptoms one would suppose the patient had taken a slight cold; but to these symptoms in a short time succeeds a peculiar shakiness and ringing of the voice as though the sound were sent through a bony tube; at the same time says Dr. Cullen there is a sense of pain about the larynx, some difficulty of respiration, with a whistling sound in inspiration; this cough which attends is commonly dry, and if any thing be spit up it is a matter of a prevalent appearance, or sometimes failing resembling portions of a membrane; together with these symptoms there is a frequency of the pulse, restlessness, and an uneasy sense of heat.
When the internal nerves are viewed, they are sometimes without any appearance of inflammation, but frequently a redness or even swelling appears, sometimes in the tongue, with these symptoms now described particularly with a great difficulty of breathing, a sense of strangling, the patient is sometimes suddenly hurried off. The countenance also exhibits great anxiety, as from the violence of the struggle the head and face are covered with sweat and the lips livid.

Croup is to be considered as a very dangerous disease destroying the patient sometimes within twenty four or thirty six hours; more usually however when it proves fatal the system withstands the conflict to the fourth or fifth day. Sometimes congestion of the membranes is brought away from the trachea. The unfavourable symptoms are indicated by the great anxiety of difficulty of the patient breathing, frequent violent, frequent fits of coughing, voice becoming more shrill, pulse irregular,
intemittency. The great fatality of this disease is conceived always to be attributed to the effusions produced during the inflammatory stage or to an inflamed state of the vocal cords of the party about the larynx, thereby closing the rima glottidis and rendering it so small as to be easily obstructed by the secretions, not never to be attributed to spasm as indicated by Dr. Cullen & others, for the reason before offered. When this disease terminates in health it is by a resolution of the inflammation, by a free & copious expectoration the croupous leaving the patient. Most of the observations, made in children dying of croup, have shown a sufficient cause of death from the effects of inflammation in some part or other of the windpipe, or its ramifications. The cure of this disease demands a prompt & active attention on the part of the physician & this consists chiefly, if not altogether in counteracting & removing the membraneous secretions which constantly endanger suffocation, particularly when the glottis is much affected with inflammation.
& swelling, & in very young subjects the danger
must be still further increased from the very
diminished size of these parts. There is in the patient
a constant effort, by coughing, to remove this viscid
secretion, which for the most part is ineffectual.

A variety of remedies have been recommended
in the treatment of cough; none but such as are
calculated to subdue inflammation, can be of any
use; any other would be injurious.

Emetics are of unquestionable advantage;
I may say indispensable; they frequently give effec-
tual relief without any other remedy. It is only how
soon in very slight attacks, that we should rely wholly
upon them, in the forming stage while yet the
disease is local; they will be greatly assisted by the
warm bath; should the disease be ushered in by
febrile action, this practice would not be admissible.

Emetics seem to cut short the disease in its nacent
state by suspending the powers of the general sys-
tem; consequently the circulation, & by promoting
the secretions on the mucous surface, thereby relieving the congested & weakened vessels, can we attribute any of their beneficial influence in the forming stage to the mechanical action which they produce, whenever there are offensive secretions to be removed, it is by their agency that it is effected, to hence their indication is obvious throughout the disease.

When there is danger of suffocation from this cause, such is the insusceptibility of the stomach in some cases, that the ordinary emetics often fail, & here it is that the bicarbonate of ammonia produces the happiest effect, used in very minute doses till an emesis is produced. When the specific symptoms have become developed, & emetics fail to give effectual relief, copious blood-letting, if to be permitted, it should be carried to the extent of producing a decided impression upon the system; should the symptoms not yield, we may again resort to the lancet.

In all cases of Croup says Dr. Bouchier which I have seen, I have found it necessary to bleed
immediately & when I have seen the patient suff
iciently early to entertain hopes of saving them, I
have directed the evacuations to be continued so
as nearly to produce fainting; this, says he, is the es-
tential point of cure, without which, no relief can
be effected; even if the patient should not be
seen till the day succeeding the attack it is pre-
ferable to bleed ad uliginem. If the subject be
plethoric & the difficulty of breathing, restless-
ness be great, by thus raising the heart, boldly at
the commencement of the attack, the inflammatory
action is abruptly broken in upon, & the disease
suddenly checked. Independently of the check which
it gives to the too great inflammation, it has also the
effect of facilitating the operations of vomiting, by un-
covering cerebral congestion & the consequent insensi-
ibility of the stomach to their action. The utility
of abstracting blood locally in this & any other inter-
nal inflammation seems to me very questionable when
the diseased vessels can not be approached. The topic
of bleeding (if it should act beneficially) must
be through the medium of the general system; when however the inflammation is seated externally as in the tunica conjunctiva, the case is different. After subdiuring the general circulation local bleeding will, by immediately emptying the distended vessels, allow them to resume their natural health. Such is the influence of an impeded respiration on the circulating forces; in some cases of cough that have been detached from the use of the lancet, the pulse however will rise as respiration becomes more free from blood letting, the abstraction of blood under these circumstances relieves the congestion & the swelling about the larynx. The next remedy in this case of importance is calomel, it is the most effectual agent we can employ when the inflammation about the larynx remains insensible to the judicious use of the lancet & other antispasmodic means. This article exhibited in free doses from 5 to 20 grains every third or fourth hour will soon subdue the disease, its virtues are not derived from small doses, some prefer giving
a large dose of Calomel at once instead of the ordinary
emetics, it seldom fails in this way to produce
a copious emesis, & act at once briskly of a cathar-
icie; the nausea & relaxation produced by the
calomel is of much longer duration than
that which attends the usual emetics; a hundred
grains of Calomel have been given to children
under 3 years of age in hopeless cases with suc-
cess: It is a singular fact that children in
some cases will require nearly as large doses
as adults. The Pelegaba Linnega has been
used as an emetic; its stimulating properties how-
ever render it objectionable, in this respect it is
greatly inferior to tart an emetic which is at once
prompt & antiphlogistic in its effects. After
the inflammatory action is reduced, a dry hoarse
 cough & some difficulty of breathing may rema-
in & then it in serviceable given in conjunction to
as to excite nausea & some vomiting. It also acts
by its Diaphoretic & expectorant powers. Dr. Strehl
who introduced this article in the treatment of
Group, attributes its virtues chiefly to its stimulating effects, & the extension of that stimulus to the trachea.

The warm bath is a useful and remedial when applied at the proper time. There is nothing more common than to resort to it in the early stages of inflammatory disease; in this way many have been sacrificed particularly children, it never fails to increase the excitement. While the disease consists in a marked irritability of the part, about the trachea, without any participation of the general system, the warm bath with emetics will frequently stop the further progress of the disease; if this state however be neglected the lancet & other means must be resorted to. Blisters applied to the throat are generally serviceable after bleeding & in the reduced state. The inhalation of warm steam has been prescribed by Dr. Homn as serviceable.

Tracheotomy has also been spoken highly of by Dr. Michaelis, as offering an opportunity of removing away the mucusinous secretion from the trachea, but this can scarcely be considered as useful.
it can never arrest the inflammatory action or put a stop to the effusion. Throughout the whole course of this disease an antiphlogistic regimen will be necessary to the bowels, kept soluble by purgatives. The patient should, upon recovery, be kept warmly clad in flannel, & the greatest pains taken to avoid exposure to cold & vicissitudes of temperature.

I can not close this paper without an acknowledgment of the many obligations I am under to each one of the Professors of Medicine in the University of Maryland for the many advantages I have derived from them during the prosecution of my studies. They will then for please accept my sincere wishes for their individual happiness & prosperity. I trust that their exertions may ever meet with that reward which they so justly merit.
An Inaugural Dissertation,
(Containing some remarks)
On the Anatomy and Pathology of the Mucous Membranes;
Submitted to the examination of the Board of Trustees, and the Medical Faculty of the University of Maryland, For the Degree of Doctor of Medicine, by John Addison of Baltimore, Maryland.
1830.
To F. E. B. Hintze, M. D.,

the following Dissertation

is respectfully Inscribed.
It is a fact ascertained by the experience of those, who have investigated the subject, that disease is confined, in a great number of cases, to a single membrane, and that in each particular texture had its own peculiar characteristics.

Without attempting to describe the peculiarities in each, I shall barely premise that it is my intention, to make a few remarks on the structure and pathology of the mucous membrane, and, in doing this, I shall only take such a view of its anatomy as will enable me to understand the nature and causes of its diseases.

The mucous membranes derive their name from the fluid which is secreted by them and which everywhere lubricates their surface. This membrane is said to be but a continuation of the common integuments, into the cavities of
of which it forms the lining, and which, notwithstanding the number, and variety, of the cavities through which it extends, is everywhere continuous, having an external outlet communicating with the skin.

Viewed in this light, not as distinct and separate membranous, lining, separate cells, but as a single tissue, extending through all the cavities, it has been separated by anatomists into two grand divisions.

The first, commencing at the mouth, lines the whole of its inner surface, and passing through the palatine nasal canals into the nose, continues through its whole extent, is reflected through the sinuses, and extending through the lacrymal ducts forms the tunic conjunctiva of the eye. Extending from the mouth to the pharynx, it sends a process through the etachian tube into the internal ear, next penetrating the trachea, and extending through the bronchia.
لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
bronchia. It is spread through the air passages of the lungs. From the pharynx it passes through the esophagus into the stomach, and thence into the duodenum; it sends off a process which passes through the duct of the gall bladder and through the branches of the hepatic ducts, and extending through the cystic duct, it is reflected into the gall bladder. Another, too, lines the pancreatic duct and its numerous branches. Finally, passing through the intestines, it terminates in the anal canal, where it is again united to the skin.

The second division, beginning at the urethra, lines it and the bladder, and passing through the uterine, is reflected through the whole interior of the kidneys. It also passes through the ducts of the prostate gland into the vasa deferentia, and extends through their numerous convolutions. In women, preceded being distributed to the urinary organs, it forms the lining of the vagina and uterus, and passing through the fallopian tubes and their opening into the peritoneum, forms the only example of a communication of a mucous with a serous membrane.
My object in giving the above anatomical descriptions, showing the continuity of its surface is to explain the extension of disease and the sympathy which exists between distant parts of this extensive membrane. An instance of the first we have in inflammation of the pharyngeal membrane, which will sometimes extend to the trachea, and through ramifications of the bronchi into the air passages of the lungs. Of the second we need no better example than that afforded by wounds in the intestinal canal, which are uniformly found to produce an itching at the nose, and in many cases, an irritation about the arm. The proof too is equally strong in the case of calculi in the bladder, which gives rise to pain and itching in the glands penis.

The mucous membrane is almost everywhere connected by a dense tissue to muscles. This has been denominated, with little discrimination, a "cellular or nervous coat." Whether it is the one or the other I shall not undertake to prove, being more immediately concerned with the first named term.
Bréhat has asserted, that like the skin, the mucous membrane has its epidermis, which is said to have been demonstrated by excising, by the action of boiling water, or the application of a blister. In all these experiments however, Bréhat acknowledges that he failed to demonstrate its existence; but he contends, that what he could not effect by his experiments was successfully accomplished by inflammation. Later writers remark that this continuation of the cuticle extends but a short distance into the cavities.

This membrane is remarkable for the glands which open on its surface, and which are distributed through its extent; but the ducts which convey the fluid to the surface are apt elude our examinations.

The use of the fluid secreted in the membrane being to protect it from the contact of irritating substances, it secretes most abundantly in those cavities in which substances, some considerable length of time, any irritating matter too always produce
an increased flow of mucous to the part. This is exemplified by the introduction of the sound in the bladder, which is found to create a great accumulation of mucous, to the great inconvenience of the patient.

If we take into consideration the great extent of these surfaces, and the fact that they perform a secretion which is constantly to be thrown off, we shall be convinced of this vast importance in the animal economy, and that very serious consequences may follow any derangement in their secretions.

The changes induced in this membrane, affecting its health, are very much influenced by the vicissitudes of the weather. The application of cold by its constricting effect, is calculated to augment the sensibility, and to increase the secretions of the mucous membrane. The first effect, however of obstructed perspiration is to produce congestion of the vessels of the membrane, which is followed by increased secretion from its glands.

Throughout its extent there is a very considerable supply of blood vessels. This is proved by the blush of red which is so remarkable in cases of inflammation, and to this it is owing, that hemorrhages are so frequently
this tissue.

From the foregoing remarks, explaining the texture, secretions, and vascularity of the mucous membrane, it will be apparent that haemorrhages and inflammations are the diseases which it is most frequently affected.

Haemorrhages were formerly considered as either active or passive, and were said to depend on two very different states of the system; one being supposed to be the consequence of high arterial action, the other of debility. I believe, however, it is rarely owing to the latter cause, though it may be occasioned by a weakened state of the blood vessels themselves.

It is generally preceded by a chill, and small, irregular pulse, but attended, during the flowing of the blood, with fever, and a pulse, in many cases, quick, hard, and full.

In treating haemorrhages, two indications are to be attended to: the first to diminish febrile excitement, the other to form a coagulum at the mouths.
of the bleeding vessels. The first may be answered by the abstraction of blood, and the full observation of the antiphlogistic regimen and treatment, and the other, by the administration of astringents.

In the mucous membrane, the characters of inflammation are different in the different portions of its surface. Thus, while the trachea inflames, there is an excretion of coagulable lymph, in the intestines, and the uterus, there is a great tendency to ulceration. In all, however, there are some general peculiarities. In it, abscesses rarely take place, perhaps never, unless there is an abrasion of its surface, or a material alteration of its condition. In general, the eruptions are at first circumscribed, but followed by a watery excretion, which alters its character, becoming more opaque, until it recover its former health and consistence.

To describe symptoms, would be to enter into a description of all the varieties of inflammation which affect the different portions of the membrane. The treatment of all with a few modifications, is the same, these being one indication to be attended to; namely, to promote resolution, which is accomplished by bloodletting, and all that variety of means which constitute the antiphlogistic
لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
Plan of treatments
An Inaugural Dissertation

on the

Muscularity & Physiology of the arteries

Submitted to the examination

of the

President and Faculty of the

University of Maryland

For the degree of Doctor of Medicine

in the 37th day of April, 1820

by

John I Craig

of

Prince George County

Maryland
An Inaugural Dissertation.

On the

Muscularity & Physiology of the arteries

Submitted to the examination

of the Professor of the

University of Maryland

For the degree of Doctor of Medicine

On the Fifth day of April, 1830

By

John A. Craig

of

Dorchester County

Maryland.

Felix, qui potuit rerum cognoscere causas
To,

Nathaniel Potter, M.D.,
Professor of the Theory and Practice of Medicine in the
University of Maryland.

Dear Sir,

The high standing in the medical world which you have so long maintained, the good which your valuable Lectures and Precepts have done, and the improvements in Practice which your genius has dictated, would of themselves be sufficient to cause me not readily to inscribe this to you. But I might justly be accused of ingratitude were I to pass over in silence this opportunity of acknowledging my many obligations to you, and of expressing my grateful sense of the advantage by me enjoyed while a student of yours.

With much respect,

I am Dear Sir, Yours tr.,

The Author.
Preface

In this age of scientific research, surgery, and anatomy, have become much more lucid, and satisfactorily, reduced to system. Chemistry, which a century back held but a mere name, compared to what it now does in the scale of science, or philosophy, has within these last few years, made rapid strides to the immensity of magnitude which it has now attained. Mineralogy, and Botany have made energetic if not equal progress. But Physiology, though steadily moving on to its goal of perfection; yet in consequence of its almost inaccessibility, must for a protracted time continue to make a slow and dragging March.

 Sed omnia vincit Labor
Et speram hanc non epe exceptionem regulo.

The constitution, formation, and function, of the arterial system: I have selected as the subject of this my inaugural address, and hum-
humbly hope though the style may be limping, and the arguments (which I may advance) futile; yet when the reader becomes aware, that they are the issue of one totally inexperienced in composition; and considers that it is not from a disposition on the part of the author, to throw his parvile effusion before him, but necessity; he may be inclined to pass over with lenity errors unavoidable on subjects intricate as Physiologoy embraces.
I am not satisfied with the situation. It seems that the measures we have taken are not having the desired impact. I propose that we re-evaluate our strategies and consider alternative approaches. We must act promptly to address this issue.

For my part, I am committed to doing everything in my power to support our efforts. If there are any additional resources or support that I can provide, please let me know. I am available at any time.

Sincerely,
[Signature]
Structure of the Arteries.

Regarding this subject there has been much variance of opinion and controversy. Haller, Bell, differ essentially in their descriptions. The former declaring, that the arteries have no proper common coat; but that they derive an external or merely incumbent integument in the thorax from the Pleura, and in the abdomen from the Peritonaeum.

In the neck, arm, thigh, that a sort of thicker cellular substance surrounds them, and that the Pleura-mater imparts a kind of capsule to the Carotido-Cerebral Arteries of the brain, at the same time settling the absurdity of there ever being such a thing as a Tendinous coat. Bell to the contrary states that after the cellular investment of an artery is removed we come at once to a Tendinous coat which he...
which he calls the external, and which according to him is so obvious that it can (particularly in old people) by maceration, be divided into several layers. Yet Haller in direct terms says, there is no tendinous coat of the arteries distinct from the cellular substance is evident from maceration, by which the inmost stratum of this arterial tunic (or the cellular) before condensed becomes cellular. In speaking of what Bell calls the middle coat, Haller speaks it over by merely stating that within the cellular, and nearer the cavity of the artery, we find fibres in general circular, recollecting however that no fibre anywhere makes a complete circle; but that many of them conjoined, with their extremities turned off, divide seem to form one ring, and decreasing with the diminution of the artery, seem to be altogether wanting in small animals. Bell
contracts every vessel of the preceding
sentence. He does not say with Haller that
between the cellular and inner, but the
lenticular and internal the muscular coat lies,
or does he say that the muscular coat is only
to be distinguished in the large arteries, and
its fibres then only running one third within
the vessel, but to the contrary says the
muscular fibres are less easily visible in
the Greater than in the smaller arteries,
that each fibre entirely surrounds the
artery; giving it contractility. Discover-
ies more modern than those of Haller prove
him wrong in many of his hypotheses. Bell's
theory has much more probability in it, and in
my opinion is a much better data upon which
I may rely in our research into the causes of circulation and its many phenomena. There is more
Elasticity in the larger arteries, but not
for much contractility, and the reason is obvious the muscular coat whose fibres (upon which the contractility depends) in them is barely demonstrable; but as we approach those which are diminutive we find a gradual increase, showing a wise provision of nature. For the aorta and other largish vessels, near the heart stand in mud of nothing more than elasticity which is not calculated to resist the shock of the heart's action; but in the extremities this is not necessary, for there the violence of the heart's motion is subdued or diminished, and consequently there is a necessity for a second or adjuvant power similar to that of the heart for the purpose of effecting the circulation; and that power in my opinion may with propriety be looked for in the muscular fibres of the middle coat. The internal coat has been generally agreed upon as being very thin, smooth, and easily
cavity taken especially in its transverse direction.

There are cellular expansions between the external and middle, and the internal and middle coats.

The arteries are themselves nourished by the

basal capillary which pass to their propertcoats

and by perforating the sheath are carried throu

gh as it were by the support and connection

of the cellular membrane. The office of the

exchanger is to render the blood by its chemical action

upon it) capable of supporting the life of

the body, and most especially the irritability

of the muscles both of the arteries, as other parts,

and to this which gives activity to the circula-

tion by causing more energy in the arterial fib-

res.
The Muscularity of the Arteries

That the arteries have a contraction depending according to its either upon the state of energy, or irritability which they at different times, may possess, together with the greater or smaller quantity of muscular fibre which their middle coat may have been composed of, seems conclusive to me. Demana in speaking of uterine hemorrhage, says that the power of contraction in the Arteries is no energetic, that it will frequently close the caliber (after the placenta has been suddenly torn away) and stop the hemorrhage, without either the complete contraction of the organ itself, or artificial aid. The power of contractility in the Arteries has been most lengthily and pertinaciously disputed by many persons who have experimented mechanically upon them.
and finding as they say upon their being pricked by a sharp pointed instrument, that they did not contract, have without farther doubt upon the subject determined them against the idea of such a power's ever being vested in them. Although arteries may not have the power of rapid or easily perceptible contraction, upon the application of our stimuli; yet we must remember, that the same law of nature, applies to other parts, the muscularity and contractility of whose coats cannot be questioned. For instance the stomach and intestines. These though possessing a vermicular, or peristaltic, motion sufficiently active while in health (stimulated by that which is natural to them) contract upon and force out their contents; yet when in experimental action upon them, we use artificial stimuli, we always find the same intimation which we observe in the arteries, under like circumstances.
This true by the application of Galvanism; they (unlike the voluntary muscles, which on the application of such a stimulus are quick in contraction, and owing to their Elasticity equally quick in assuming their former dimensions) slowly and reluctantly contract, and when once that is effected, they remain so: never regaining their former size. In answering to foreign stimuli, great difference may always be observed to exist between voluntary and involuntary muscular fibers; as may at any time be satisfactorily proven, by taking one of each and exposing them to the action of a Galvanic battery or voltaic pile. The voluntary muscle will be seen promptly to answer to the stimulus with a quick contraction, and with equal promptness will return to its wonted size; but the other as reluctant in its obedience to such stimuli as to that of
the will while within the living body: if it con-  
tract at all will always after remain so.  
But why need I stop thus to endeavors  
at a computation of what Vereschuir and  
others since since Haller (who argued from  
such experiments) have denied? Vereschuir  
shortly after Hallers experiments upon the  
arteries tried the same, and reported that  
they did in some degree contract on the appli-  
cation of ordinary stimulants. And his  
result has been amply confirmed by the  
measurive investigations of Dr. Thompson,  
Philip, & Harting. Dr. Philip placed the  
web of a frog foot in a microscope, and  
distinctly saw the minute ramifications of  
the arteries therein contract upon the  
application of those stimulants which  
produce a contraction of the muscular pile  
everywhere. He also publishes that he
distinctly observed the circulation in the muscles of the legs to continue for some time after the heart was entirely removed from the body. The same observation was made by Dr. Hartley, proving beyond a doubt that, such an effect must have been produced by the action of the Cerebro, independent of the heart's agency. Those who are not willing to yield to the opinion of the organic muscularity and innate action; being somewhat at a loss to account for many phenomena of the circulation, such as difference of pulsation, which is sometimes to be met with in the radial arteries of the same person, at the same time, inflammation, blistering, apoplexy, etc. have been forced to this assumption; that the capillaries are a distinct set of vessels from the arteries and veins; and to place in them all that power, which reason
and partly teach us is vested in parts of
the animal economy, other than that of
the heart. I must here ask the question:
Has any precise line of demarcation been
satisfactorily, or indeed in any way pointed
out, by which we can say these are the
arteries, these the Capillaries? Or when
I say these Capillaries to which the name of
Capillaries has been attached, are exclusively
the minute ramifications of the arterial
system. Can any one except upon hypo-
thetical premises, contradict such an asser-
tion? As the muscular fibre continues
to increase in equal ratio to the decrease
of the arterial circumference, I am per-
factly satisfied that the minute ramifi-
cations or in other words the Capillaries
have more contractile action than the
trunks have. But at the same time
must observe, that each and every part of the arterial system has more or less contraction. As an example in proof of which we have in Paronychia the thrombosis of the digital arteries extending upwards and affecting more of the animal; and in many cases is so obvious as not to escape the observation of the most inobservant. Dr. Hofack (in his treatise on Phrenetics) says, that the application of cold water to the head in the disease is injurious frequently from an increased flow of blood to the rest of the disease, which follows its use. This though I imagine never takes place where the water is kept applied a sufficient time to act as a sedative, there by quelling inordinate action the proximate cause on disease itself; yet it may be recognised by the fact, if it.
out, a small quantity of cold act as a stimulant of tonic, which necessarily must in-crease the action in these cases of the already prematurely irritable arteries. The arteries of the head in acute inflammation of that organ, have their action so increased, that some writers have stated their having seen the head moved while lying on the pillow, by them at each pulsation. This I am inclined to believe is saying too much; but certain it is, in such cases the increased local action is sufficient frequently to draw to it the attention of both the scientific, and igno- rant, who may be in attendance upon the patient. How then can we account for this phenomenon, unless, by the admission of arterial contraction? The great controversy respecting the vital powers of the arteries has been concerning their contractility, which
necessarily resolves itself into a further question, intimately connected with the first: 
by which the transverse fibres which have been called the muscular coat, are 
justly entitled to the name of muscle.

To ascertain which, many Physiologists 
have gone to much unnecessary pain, in 
testing their constituent parts by Chemical 
analysis, also other (and as they call them 
proper muscles) and comparing their extent.

By chemical analysis that a difference 
may be found between the transverse fibres 
of the arteries, and other muscles, will be 
most readily admitted; but that objection, 
to their muscularity, I consider altogether 
inadequate, when we reflect upon the 
decided marks of contractility which is 
manifested in many of the lower classes 
of animals, as the Actinioidae, the 
Octopuses
ence of which is at least as unlike that of the warm-blooded animals, as the transverse fibres of the arteries can possibly be conceived to be. Excellent Bichat was agreed upon the theory that the greatest phenomena of the circulation have their existence in the action of the capillaries; the latter of whom asserts that they have a contractile essentially independent of the heart. Lermynier says the article of circulation was unanimously argued, that the circular fibres are not musculous nor the arteries contractile, but restricts the term artery to the larger vessels, and supposes the capillaries to be a sort of vessels distinct from all others. An hypothesis which neither Anatomy or Physiology will sustain him in; for as I have before stated: no one can demonstrate (even if there be) such an arrangement.
The fact that the Arteria does not con-tract to a very perceptible extent has
long been known and by many, that contrac-
tility has its power increased in equal ratio
to the diminution of each artery according
to its size, on account of the gradual thin-
ning of the Muscular coat as it proceeds from
the heart, and becomes minutely divided.

Therefore I have come to this conclusion
that the most minute arterial branch
or Capillaries (if you like) are of grea-
ter contractile power according each to
its individual size than the greater
arteries, and without their aid we could
have no such thing as circulation.

An elaborate set of experiments was
performed by Hunter, the object of which
was to distinguish between the elastic and
Muscular power of the arteries in which
the existence of this latter appeared to be fully established. He bled an animal to death, by which the arteries were brought into a state of complete contraction. Portions of them were then taken and still open longitudinally and being distended by a weight in the transverse direction, for a short time were found on the removal of the same, that they obviously contracted. There is in the animal economy a phenomenon concerning which no Physiologist whose works have come under my notice has by any means satisfactorily accounted for. Namely the sudden erection of the Penis. Those who have argued against the contractility of the arteries suppose that effect to be produced mechanically. They say that the Erections Penis, when stimulated by too great redundancy of semen contained in
in the Reversiulce Seminalis contract thereby preposing the penis against the umbi and Symphysis pubis; comprep the vena magna and prevent the blood injected into the organ from being returned to to the heart as is the case in its flaccid state.

I imagine such theorems have not given themselves the trouble of fully investigating the relative anatomy of these parts, or certainly they never could have been so grossly delineated, as ever have suggested such an explanation. Let us inquire into the anatomical and physiological relation which these muscles bear to other parts?

Then may we begin by asking this question, does the Erector's arise from the美化 body of the pubis, that they should have been supposed by their contraction to raise the penis? Or are their insertion such that did they act at such times, contraction
ton, they could possibly produce the effect, which has been assigned them? I am not a little surprised that Bell, who in his anatomy of these parts, makes mention that the erectores are supposed (by pressing the penis against the pubis) to compress the great bursa and so cause an erection, had not from his knowledge of anatomy exposed the error.

The Erectores have their origin from the most inferior portion of the Pelvic bones by the inner edge of the Ischiorecti of the Ischiatic bones, and run along up flesh, thin and flat, over the crura penis, and end in a delicate and flat tendon upon the crura about two inches from their origin.

With such facts presenting themselves, I should be much more inclined to call these muscles Depressores, which appellation would in my opinion bear along with it better the principles of physiognomy, than the
the one which has been so unhappily disposed
upon them. Grant that they have an ac-
tion, to which they are excited by sexual
desires: and have proved them to have an
origin inferior to the organ upon which the
dy are to act, how could Physiologists from
such premises draw such an erroneous con-
clusion, as that they act upwards? An abs-
curiosity too clear to require argument in
consevation of. Nor will I here introduce
an any other means of conservation than
ly merely, asking this question; can a body
fall against its own gravity? Or a muscle
act contrary to its origin insertion? Or
in other words can a force below pull
upwards? I could endeavours upon differ-
ent principles to account for the same
effect, which the admission of arterial
musculosity can be much more satisfac-
tory done. In the first instance
where the effect is produced by rotation, or libidinous desire; the first impression originating in the brain is from thence, through nervous communication conveyed to the arteries of those parts which they move; formed by nature obedient, especially to such impelling or urging, being thus stimulated just on an increased action of their own; and as the Sema magna which must equally at all times perform its necessary part, that of returning the blood, by the arteries conveyed to the organ (it not having a muscular or contractile coat to be stimulated) can subsequently when the action of the arteries becomes increased they will in a proper way in this case propel the blood forward to an organ much faster than it can be conveyed back to the heart. This would seem to us more rational than to suppose an erection the effect of the Erectores. It is true that sometimes without motion an erection may be produced.
but think can most confidently be accounted the result of nervous excitation, or irritation, acting upon the nerves of the part, thereby stimulating the arteries, as in the above said case to increased action. We in part can agree with those who might be inclined to attribute this effect to the minute arteries or capillaries; but in most cases no sudden is an excitation produced. And we cannot hesitate in affirming that the combined action of both larger and smaller arteri- es go to produce it. For an incontestable law in the Animal Economy that a specific stimulus acting upon an organ for which nature designed it should call forth the specific function of that organ; consequently when the inanimate vessels have received an overquantity of arterial fluid, this becomes an exciting cause to the peculiar action of the nerves to which the stimulus is first applied, thence the arteries are stimulated and act accordingly. That inflammation is caused as many a part of the want of energy or tone in the vessels of the part.
Hurt these affected, you persuade me, my opinion, to prove that action in them is necessary to effect, at least a voluntary circulation. But in this I do not believe for surely if the circulation did depend upon the heart as the only source of power from which it received its energy and that through it independently of all other agency, all which we now observe were produced, then could not with much confidence say, that although by some means, or other the effects of any part of the body were debilitated, yet as they (according to those theorets) act necessarily by convulsions or conduction, relaxation in them would not cause cessation, but to the contrary would allow the fluid to flow through them (propelled by the vis a tergo) with much less difficulty, their calibre being then larger than it otherwise would have been. If a small living artery be cut across it soon contracts so as to close its canal, and arrest the hemorrhage, and by this mean bleeding arteries have been stopped without the necessity of a ligature; this is a
a self-evident thing, and one which every practitioner
now is familiar with. While an animal
is bleeding to death, the arteries accommodating
themselves to the decreasing quantity of blood
contract far beyond the degree to which their
simple Elasticity would carry them, and they
relax after death; showing that contraction
which is a loving principle in them is absent
after death takes place, there then being but
Elasticity left. Dr Hales took seventeen
groats of blood from a horse before it died,
in whose body, only three groats more were
found, and yet the moment before death, the
tension of the arteries sustained a
column of blood two feet high in a experi-
mentical tube; proving beyond doubt the
ability of the arteries to contract upon and
accommodate themselves to their contents. When
a living artery is tied the part between the
ligature and nearest branch on the side of
the heart gradually contracts, and finally
becomes an imperious cord. To those
who believe that inflammation or all—
all preternatural redness has its origin exclusively in muscular debility and relaxation; I would propose these questions. Under what head is Ether placed when it is applied to the skin the air being excluded so that it cannot evaporate? The answer is clear, it must certainly a stimulant.

What is it though, when the atmosphere is not excluded and it suffered to evaporate which it does with the greatest rapidity? Is then unquestionably a potentate. Then what are its very apparent effects? When for instance I pour Ether in the palm of our hand, and apply it so closely to any part of our moist body (for a short time) that it cannot evaporate, instantly upon removing the hand the skin will be found red, but in a few seconds after, it will assume a death-like pallor. This must have fallen under the observation of many, and I am at a loss to know how those believers of relaxing debility would give a satisfactory explanation of such effects. Certain it is that in the first place the minute arteries are stimulated to inc
increased action, there being a stimulus applied, and in the second, they are produced by a
potentate. The arteries are in a living form always full of blood, as the microscope shows, both in their diastole and systole. Dr. Haller says the contraction of an artery follows in regular successions: dilatation, he goes on further to state that the heart having emptied itself and removed its stimulus, becomes quiescent. But the arteries, at that instant by the innate elasticity residing in its muscular fibres, being excited by the same stimulus by blood thrown into it contracts and expels as much of it as has been received into it, above its mean capacity.

It appears to me that in this clause of Haller, there are too many qualities of an artery brought in to effect that by the contraction of the artery, and expulsion of the blood which is injected into it by the heart above its mean capacity, which elasticity itself is in all respects equivalent to. What is elasticity but that property of a body in which there is a force by which it endeavors
or for the restoration of its natural size.

Then I am at a loss to know why a person believing in the Rebec theory should wish to beg
in Spiritability to aid him in his inquiry into the circulatory phenomena? In conclusion
I have but to remark that from various ex-
periments we are fully justified in the belief
that the arteries possess a proper contractile power,
and that many arguments can be adduc-
ed to prove, that this power resides in
their transverse fibres. It appears to
me most satisfactory, likewise, that
this contractile power is principally vested
in the more minute or capillary arter-
es, while the large trunks possess
it in a much less degree. Indeed every
fact, with which we are acquainted on
facting the mechanism, and func-
tions of the circulatory system leads
us to the same conclusion, that the
large arteries are to be regarded not
only as tubes by which the blood is conveyed
through the system, but active adven-
unters.
in the circulation. Yet that it is in the smaller branches of capillaries that we must admit the greatest action. This is an inexhaustible subject; one upon which volumes might be written; but in so much as I have now come up to, if not transcended, the bounds of the wonder (if such this may have) patience shall content myself with the remarks already made.

Finis
An Inaugural Dissertation

on

Crural Hernia;

Submitted to the examination of
the Provost, Trustees & Medical Professors
of
the University of Maryland,

by

Thomas Littig,

for the Degree of
Doctor of Medicine
March 4th, 1830.
By the term Hernia in general we mean a protrusion of any organ or viscera through the walls of the cavity in which they are contained. The word Hernia is derived from the Greek, meaning from its protruding out of its place. But this term surgeons understand a protrusion of some of the abdominal viscera out of that cavity but still retained within the common integuments. There are three varieties of hernia from the abdominal cavity, according to the place or part at which they are protruded. But as it is not our intention to treat of hernia in general, we shall confine our remarks to one of the varieties, viz. Urinal Hernia, which is a protrusion of some of the contents of the abdomen through the Urinal Arch under the integuments of the thigh.

The cavity of the abdomen is always filled by its viscera, and the parts are held secure by the admirable arrangement of its muscles. The fibres of each muscle crossing that of the other, which is in contact with it transversely, thereby forming by its thin layers of fibres a complete net-work. The abdomen is acted upon by two opposite forces which counterbalance each other. The viscera acting against the muscular walls of the abdomen, the parietes acting again upon the viscera; an equilibrium is established. But there are certain certain parts of the abdominal parieties which are naturally weaker and consequently make a much greater resistance to the action.
I shall now give an anatomical description of the parts concerned in crural hernia. The external oblique muscle arises from the right inferior ribs near their cartilages, from the spine of the ilium. Its fibres run obliquely downwards and forwards, and terminate in a thin broad tendon which is inserted into the linea alba its whole length, about an inch and a half above the pubes, the tendon splits. The anterior column is inserted into the symphysis pubis and the posterior into the spine of the pubes. The division of the fibres of this tendon form what is called the abdominal ring. From the spine of the pubes it stretches across to the anterior superior spine of the ilium. Three fibres which arise from the inferior ribs tend to be inserted into the inner edge of the anterior half of the spine of ilium. The folded edge of this tendon which is stretched across from the anterior of the ilium to the spine of the pubes is what is called Periarticular ligament. The internal oblique arise from the third, inferior, lumbar vertebrae from the os ilium, from the whole of the spine of the ilium and from the outer third of Periarticular ligament. From these origins the fibres of the muscle run in different directions; the posterior portion ascends obliquely forwards, the middle portion obliquely

the pubes than other parts and especially that part which extends from the pubes to the superior spine of the ilium. And this part is sometimes further weakened by malformation, accident etc.
and some of them in a horizontal direction and the anterior portion
trades obliquely downwards, inserted into the uniform Cartilage; into
the Cartilage of the seventh and all the falces ribs. Its tendon divides
its two layers, going one and under the rectus to be inserted into the
inner alba; its anterior and undermost part is inserted into the aponeurosis.
The transversalis arises from the inner part of the Cartilages
of the seven lower ribs, from the last anterior of the back of the four
superior of the loins, from the whole the sternum and ileum internally
from the outer part of the parts ligament and is inserted into the
uniform Cartilage and the whole of the inner alba excepting its
lower part. From the origin and insertion of these two last muscles
it will be perceived that there is a triangular space not supplied
with any. Covering from these muscles or their tendons, this space is
supplied with a strong fascia Called fascia transversalis. It
comes down over the abdomen between the peritoneum and the
muscles running across this space goes under the parts ligament
where it joins the fascia iliaca, which comes down over the
posterior part of the abdomen passing over the great and iliacus
intermuscular muscles. These two fascias join and at this place become
thicker and thus forms the femoral ligament or Hajol ligament.
In the center these fascias are not joined, but leave a small
open space thru which the femoral artery and vein pass out of
the great vein of the leg. Called the femoral vein pass thru the
The vein lies on the inside and the artery on the outside. This opening is entirely filled up by the rectus and oblique ligament, and it is this space that external hernia takes place. The rectus ligament extends from the inferior arch of the ilium to the superior part of the pubis. It is connected to the fascia lata of the thigh which consists of three layers. The first layer is reflected off from the external oblique to the fascia lata of the thigh towards the inner part of the thigh, towards the pubis, which contains the superficial veins and absorbing vessels, passes into the abdomen and the external layer passing over the thigh from the fascia lata, presents at this place a crescentic margin below this space becomes intimately blended with the other layer. The second layer is formed by a continuation of the fascia lata, and in like manner with the first presents a crescentic margin to this space, like the other soon becomes intimately blended with the other layer, thus we have two layers around the other forming crescentic margins around the space which is formed by them. The third layer is a continuation of the fascia iliaca which keeps close to the muscles and forms the floor to this opening in the fascia lata and over which the great vessels lie.
...nine to fill up this space. It comes down from the iliacus legamentum and is firmly attached to these crescentic margins and passes inward called the Oblique fascia. The hernia is always protruded on the inside of the vessels, pushing the loose cellular tissue before it follows the course of these vessels into the space we have just described as the fascia lata & pushing the Oblique fascia before it generally perforates it at the place the place where one of the largest vessels pass through, or extending it through its arch it rises over the crescentic margins towards the parts legament and lies over it on the abdomen. The hernia thus protrude carries with it a fold of the peritoneum and the loose cellular tissue which fill up the Coursul Arch and thus comes in contact with the Superficial fascia. The Oblique artery coming off from the common iliac about an inch before it passes out to the thigh, runs upon the abdomen & passes on the outside of the Coursul arch. This artery sometime gives off the Obturator artery. It is generally given off from the internal iliac, but when given off by the Oblique, it runs downwards by the internal margins of the ring. It may thus pass over the neck of the hernia but most frequently it will be on the inside of the hernia. This hernial neck generally contains either intestine, Omentum or both intestine & Omentum. If a portion of the intestine alone forms the contents of the hernia it is then called Interocele. If the hernia contain only Omentum alone it is then...
Celles Epiphlocees; and if both intestines and Emundum be contained in the back it is then Celled Ente-epiphloceo. This is a variety of inguinal hernia which in its situation resembles Osual hernia, when the latter has passed over the Crescentic margins of the fascia lateraums and turned over Genual Ligament. It is when the contents of the hernia lasting till the abdominal ring remains in the groin or have not passed into the Peritoneum, this Variety is then Celled SubepOLONeO.

Cases of Osual hernia have been mistaken for subepolonoea and much mischief has been done to the Contents of the hernia in the use of the taxis. In inguinal hernia they prepare made on the tumour by the hands of the operator must be upwards and outwards. While in Osual hernia it must be directed first downwards and backwards and then upwards. But the true nature of the Case may be very easily discovered. Inguinal hernia is always above compact Ligament while Osual hernia is always under compact ligament.

If then we run the fingers along this ligament and can thus trace it out in its whole course finding no tumour we decide at once that it is Osual Hernia. We may be able to distinguish a Case of entecele by the smooth slipping surface of the intestine. If it be distended with wind, inflamed or if there be any strewing on it, it will be tense, elastic, resisting the pressure of the fingers, and painful. If there be no inflammation or structure the tension will be slight, and no pain will be felt upon handling it.
When the patient coughs, the intestines will feel as if it were blown into it. When the bowels are returned, a gurgling noise will be heard. If the hernia be an epiplacocele, it will have a flabby and unequal feel, and will generally be indolent. If it be an entro epiplacocele, it will be more difficult to ascertain its nature, it will have somewhat the feel of both the other varieties. The hernia, with its envelops, is protruded, so the peritoneal arch into the groin, thus opening in the fascia lata. It may be either reducible or irreducible, without instant strangulation. It is termed reducible when the protrusion may lay quietly in the sac without pain and capable of being returned into the cavity of the abdomen with ease. The symptoms of this kind of hernia are as follow: the tumor is generally formed suddenly and is indolent. When the patient is in a recumbent posture its size is dependent and it is enlarged upon walking or taking exercise. When pressure is applied to the tumor it will be felt to sink in the skin and when the pressure is removed it will enlarge again. This hernia will be found increased in size generally after meals or when there is any flatulence. The patient is generally troubled with colic, nausea, vomiting & constipation in consequence of the displacement of the intestine. It very often happens however, that no inconvenience of this kind takes place and all the functions are performed with but little interruption. By adhesions from the hernia to the surrounding parts, it may become irreducible, and the patient become in the inconvenience of hernia during life, by inflammation.
Produced by external violence, Cold to a structure may take place, foiling any hopes of relief. The hernia may be strangulated at several points, which it passes. In the first place is most generally by the femoral ligament, secondly when it passes thru the oblique fasciae, which is very strong t. forms of transverse bands or fibers and thirdly by the external margin of the fascia lata. Sometmes also (the are believe but seldom) by Gumberts ligament, which is fluid from Tenpirts ligament at its insertion in the spine of the pubes & inserted into the linea iliospinosa near the symphysis pubis, protracting outwards a simular margin. The symptoms of incarcerated hernia are, pain upon touching the tumour if the intestine be protruded & the pain is increased by Coughing or standing on the feet. The pain is not confined to the part but soon spreads over the abdomen which become swollen and tense accompanied by sickness and occasional vomiting. The faces do not pass off and fever ensues. These may be termed the first symptoms. If the patient is not relieved, the vomiting becomes more violent & frequent. At first the contents of the stomach only is thrown up but now bileous matter is discharged and ultimately a feculent matter of an offensive character. The pain becomes more intense the tension of the abdomen much greater, the fever increases and general chillers of an insupportable kind comes on. If the patient be not yet relieved, urethra common which indicates that constitutional is about to take place or has already
taken place. Suddenly all pain ceases and the intestine returns of itself into the abdomen or if not it is returned by the slightest pressure. This is followed by a copious discharge from the bowels and the patient and his friends mainly imagining that a cure has been achieved; but the hiccough increases, the pulse from being hard and full becomes weak & languid, the extremities become cold, the skin covered with cold sweat, the swelling and tension of the abdomen subsides. The eyes assume a glassy appearance, the skin covering the tumour is erysyrus and the patient expires.

Upon the treatment of reducible hernia the only hard to say that it should be returned as soon as possible and the parts supported by a trap. If it be irreducible we cannot employ a trap & all that can be done is to support it by a suspensory bandage and forbid much exercise. We shall next notice the various measures to be adopted for the relief of intussiculated hernia, and first of the taxis, by which we mean the efforts made by the hand of the surgeon to reduce the hernia. The patient is to be placed in a recumbent posture, the legs turned inwards and the knees bent, by which the fascia will be relaxed. The prone must be (made downwards, backwards and then upwards; but we should not make any violent efforts to reduce it in this manner. If the intestines be much inflamed the patient cannot bear much pressure and hence it is improper. If we cannot succeed
ly gentle efforts we must resort to other means of relief. By circumstane
are not forbid, we should now bleed freely and then try the tax again.
If the cannot then succeed in reducing the hernia, the patient should
be placed in a warm bath and the efforts by taxis renewed. But if
the bath be not prepared while it is preparing, as no time should
be lost. Cold applications and enemas should be tried. Bladders of
founded ice should be applied to the tumour. Or ether dropped upon
it, but the last should be used with caution, as by too sudden
reduction of the temperature, mortification may take place and the life of
the patient be lost. A solution of nitrate of potash or alcohol may be
employed to advantage. Injections of tobacco in smoke or decoction has
been recommended, but we deem it on the whole a dangerous remedy,
as it is likely to produce extreme prostration. If the hernia still
be protruded together with bleeding, we may employ cathartics
and enemas, by which we will be likely to succeed. If all
these means should fail, we can not perform the operation too
soon. We believe that may lives have been lost by delaying
it too long. We shall next day something of chronic strangulated
hernia, which takes place in hernies of long standing, from some
degree of inflammation having been excited in the tumour.
The symptoms are altogether less violent than in the acute stage.
The part is exempt from the great tenderness and pain found al-
ways in the acute kind, and in a word the the symptoms be somati
similar in kind they differ greatly in degree. We shall be more likely to succeed in reducing this scarcity by the laxis, as the pain on handling it is generally but slighting. We should be careful nevertheless not to use violent efforts in pressing the tumour. We should proceed gently in all our efforts least we excite inflammation and change it thereby into the acute stage. If we can not readily succeed with our first efforts we should next bleed if we deem the patient capable of bearing it. In may then if we do not succeed proceed with our treatment as stated in the acute form, only we will have more time to try the various means mentioned above and should all these fail we may then as in the acute stage proceed to operate for its relief.

We shall now describe the manner of operating. Some surgeons recommend two incisions in the integuments in the form of the letter T reversed. One of the incisions is to be commenced about an inch and half above the crural arch, in a line with the middle of the tumour and carried down a little below the center of the tumour. The other incision is to be made nearly at right angles with the first and drawn from the inside across the tumour to the outside. The angular flaps are then to be dissected up and reflected from the tumour. But the most of surgeons now are of the opinion that there is no necessity for a double incision. They commenced about an inch
above the Crural arch I continue it obliquely downwards and outwards.
The first incision brings into view the superficial fascia, which is
reflected off from the external oblique muscle, and is the first or
Anterior Covering of the sack. If the patient be emaciated and
if it be a recent hernia this fascia will not be readily found
as it then adheres closely to the skin. When we divide this fascia
we come next to the Oblique form fascia, if the hernia has not passed
it, but generally we will find it perforated by the hernia. After which
a person not well acquainted with the anatomy of these parts
would suppose that they had now come down upon the hernial
sack itself, from its appearance it being only covered by a thin
fascia, Called fascia propria, which the hernia pushes before
it in passing thru the Crural Ring. This is next to be carefully
divided from the neck to the fundus of the sack longitudinally.
When we have divided the fascia propria of the subject be
flat you will find an adipose membrane laying next the sack.
Having reached the hernial sack it is next to be opened which
requires a Cautious procedure least two wound the intestines.
Persons are very apt to mistake the fascia propria for the sack
itself and the structure is then divided on the outside of the sack
while the intestine may be strangulated inside and thus pushed
into the abdomen. In order to divide the sack with caution it
will be well to pinch up a small portion of it between the fingers
...and on the other we will be able to ascertain if we have taken up anything else but the sack. Being satisfied that we have not included anything else between the fingers we may cut a small hole and introduce a director and thus open the sack from the fundus up to the crus of the arch at which place we have stated the stricture most frequently occurs and at which place we will now suppose it to be. We are next to insert our finger nail under the ligament at the point of the stricture, then passing a director over our finger insert it under the stricture and taking a probe pointed bistoury we divide the structure. Cutting directly upwards into the angle formed by the epigastric and obturator arteries always supposing them thus divided, as we can not ascertain by any known method whether the obturator artery is thus given off and surrounds the neck of the sack or not. Which being done the structure thus divided we may easily return the pretended disease.
April 3, 1830

To the present faculty and trustees of the University of Maryland,
this inaugural dissertation is respectfully submitted by J. W. Pumphrey of Va.
April 30, 1830

To R. R. Smith, professor of surgery in the University of Maryland,

Lear Sir,

Dying many obligations to you for the kindness and friendship you have always manifested towards me, permit me as faint and imperfect testimonial of my respect and esteem to inscribe to you the following pages. They contain nothing of merit in themselves—the only value they have is, that can be attached to this dedication is that it comes from the heart of its obliged and grateful

Author. W. M. Cumpbrey
An inaugural dissertation
on the influence of the mind in producing changes of sensation and morbid action in the human system.

Fundamental to every process of reasoning there are primary truths, which being admitted, without debate, become the groundwork on which the whole superstructure is erected.

Thus in algebraical problems certain elements are assumed, and in our discussion about the laws which regulate matter we take it for granted that matter does exist, and that it is known by certain properties.

To in reference to the theme of inquiry now proposed, I regard the separate existence of the mind from the body, as self evident truth. To were I to contemplate the mind merely as a modified result of the organization of the body, there would be a palpable absurdity in attempting to show that one portion of the body had an influence and agency on another portion, these being a pervading influence of harmonious co-operation exerted upon the entire circle of the bodily organs. But the mind, although intimate union with the body, is yet a distinct entity. Though commingling with the body and deeply implicated in all its movements, it still manifests a superior nature and a far more noble destiny.

View man with a philosophic eye from the cradle to the grave! See him wailing his infant cries beneath the canopy of a mother's smile, then behold the same being imaged within the narrow confines of the sepulchre; and say ye sage speculators, can you discover anything either at his birth or in his meridian prime or in his mournful exi from life which furnishes
Now with convincing proof, that the mind is but a part of frail body—that the
body and soul are the same?

And the part of reason to draw deduction from presumed modes known, and in
mind corollaries from data indisputably established. But it is the part of
reason, even to deduce sound conclusions from mistaken premises.
Reason should abstain from all foreconceived inferences, where proof is not
founded.

Now apply the rule of correct philosophy to the subject of mind. We have
no evidence that the mind and body are the same; and we should, therefore,
not so confidently intelle a thing to utterly above our cognizance.
Yet we have cogent proofs furnished, that the mind is governed by laws chro-
nically distinct in nature from those which control our material fabric.
Though a very intimate connexion may exist between them, yet there is
evidence to demonstrate that they are not identical.

Some will not prosthetic, neither will the reciprocal agency of mind
and matter on each other establish, in the view of correct philosophy, the opin-
ion, that the mind is but a subtle, spiritualized product of the brain.

The subject is known by its own peculiarities. The body is recognized by its own
properties; the mind is recognized by its own attributes. There is no sort of
full comparison between the properties of the one, and the attributes of the other.
The operation of mind differs essentially from the inert properties of matter,
and the causes which induce activity in the mind, have no kind of
agency upon the physical organization of man. The mind is gov-
erned by motion. The body is actuated into movements by en
tropic applications.

The ancient philosophers denominated the mind to be a self-
moving, and motion giving power. They designated the body as the
spark of the mind, the physical medium through which it acted.

Phrenology, not satisfied with the simplicity of this opinion,
has boldly come forward and challenged our acceptance; and
was one of high demand invested, that it possesses the only key which can
unlock the mysteries of the human intellect. In an essay of this kind I
have not time, to enter the arena of controversy against this utopian
hype which springs from the fertile region of novel doctrines; Germany,
and which has been fostered in the hotbed of all extravagant opinions.
The phrenologists take certain facts for granted, and then endeavour
to erect their system on such postulata. They are not so modest as
behinds who asked for a place to stand on that he might move the
world, the assume the right to take possession of a place, though
it be in a land of shadows. They take for granted two things, the
most acute of them can not prove. 1. That the faculties are intu-
tuents of the mind. Whereas the mind and its faculties are the
same; what we term a faculty being but a particular state or mode
of operation of the mind. 2. As matter disintegrate of figure, solidity,
visibility and extension, is a nonentity, so the mind aside from
its faculties has no real existence. The second position assumed is
that there are division of the brain called organs which are to be seen on
the periphery, or surface of the brain under the skull, which develop
ments, or organs, impress their figure on the cranium or skull in
such a way as to be noticed on its exterior configuration.
Now all this seems to be a matter of conjecture. Take off the skull, and the
white surface of the brain is alike in extreme top and configuration,
and let us see grains held that the organ are there, but how to be seen.
Whale I like the spirits in first verisell, they only come at the bidding
of their master and are invisible to every eye but else.
Eclipsing from all such entangled and conjectural explanation,
we may adopt the opinion of the ancient philosophers as near the
truth as the unattained light of nature can conduct us.
It was left for a more splendid manifestation of light, to clear any
the obscurities which so long rested on the human mind in
ference to the nature and destiny of the spiritual principle in the
animal of man. The stream of light from heaven which pours its full
tide upon the intellect through the clouds of our natural ignorance,
has chased away the delusions which so long cheated the human un-
standing, under the imposing semblance of true philosophy.

It does not become us to dogmatize on a question so dark, as that
would in a view of the connexion existing between the mind and the
body. That there is a union of an intimate tie admits of no dispute, that
body perishes after a lapse of a few revolving years, we see every day
proved; and that the mind will exist, independent of the body, beyond
the narrow circle of time, though rationally to be inferred from the
more glimpses of nature, is clearly announced to us by revelation.

Let us here rest satisfied, and enter directly upon the discus-
sion of the influence of the mind in producing changes of sensations and
conditions in the body. Coequal with the first human emotions which
experience, is the agency which the mind exerts on the health of the
animal system. Although no very urgent or lasting feelings actuate
youthful heart, yet even in the very primrose of juvenility, the
mind exerts an influence over the health of the body.

Whilst the budding faculties are unfolding and the unbroken moral
principles are maturing, whilst the glow of novelty is fresh on every object
around, and the song of hope enchants the youthful step—ever
this period of our earthly existence, do the agitations of the passions
produce dangerous attacks of disease. Thus an eminent surgeon in India
states that he saw a fine child fall a sacrifice to the emotion
aroused by her school mistress, bidding her up in a dark cellars
with delirium, was the consequence, during the continuance
which her constant cry was, "Don't shut me up in the cellars."

But as the powers of the animal economy grow more vigorous,
and the faculties of the mind increase in strength and extent of
operation, the inlets are constantly multiplying through which the impressions which minister food for thought and emotion are conveyed. As we rise higher on the scale of human existence, we tread a more elevated pathway of mental and sensitive infusions, and at the same time enlarge the surface upon which the impressions of pain and sorrow are inflicted. As love and hatred, grief and joy, hope and fear, by turns sear our hearts so our bodies are affected with the alternation of depression and increased action, consequent to their variant agency. Our refined mode of life has increased in a degree beyond present enumeration in amount of painful and pleasurable sensation; our minds are softened by arts and accommodations of luxury, and actuated by the insinuant play of those feelings which the multifarious events of life excite: whilst our bodies are rendered more susceptible and excitable from the tenderness wherewith the soft indulgences to which civilized man is addicted.

At the same time art has multiplied her resources, and given us aid and facilities by which the evils induced by art are either prevented or repaired. Especially, has education clothed the mind with an offense and defensive armor by which man is enabled to wage a successful warfare against many powerful enemies. Enlaid in an intellectual being becomes the lord of creation, and the master over the lower principles of brute nature.

The instinctive ferocity of the lion suffers no controlling principle of his nature to exercise a dominion over this king of beasts. But it is the glory of man, as a moral and intellectual being, to subdue to his passions, to lay by craft, and forbear though shall come but no further.

The mind of a savage man approximates to the character of inferior animals; his bosom a few strong passions have mastery. In obedience to the laws of self-preservation, he pursues the chase, in accordance with the vice of whose, he throws his body recumbent, till awakened by the calls hunger or the war whoop, he rushes forward in pursuit of his game, or the prowess of his enemy.
The folded up powers of mind, more often beneath the genial ray of education "the intellect is not replenished, he is an animal, only sensible in the animal parts... Yet at times the ethereal spark derived from above, flares forth unhindered the whole man.

My object is not to show the effects of the passions on the language in exterior parts of the frame, these being within the appointed scope of the rhetorician and painter, but to indicate the operation of the mind either in its calmer exercises or more excited moods, upon the health of the animal system. Particular emotions not only have a general influence and agency on every part of the body, as an integral matrix animated by the vital labor, but a special baring upon certain organs.

This great anxiety of mind not only impairs the intellectual and diminishes the general vigor of the system, but often induces prejudice. This particular reference of action to an organ may depend upon an acquired or constitutional tenacity to a particular debate.

But when we reflect, that affections of the heart disturb the mind in a singular degree, we will presume that there is a direct, however mysterious, ethereal influence existing between certain mental operation and different parts of the complex machinery of the human frame.

With these general remarks, I will pass on to a particular analysis of the kind and extent of action excited by different emotions of the mind, on the phisical structure of man.

A calm and temperate employment of the intellectual powers will never impair the energy of the system. But a protracted and intense attention will, by interposing with the demands of the animal economy, by preventing exercise and making inroads on the nervous system, thus depriving the excessive vigilance, man in a considerable degree, the equable excitement the system.

There is a faculty of the mind, very operative and influential now, in both and in each of its faculties, one faculty where discursive flights at times transport...
the soul into elysian, and at other times drag it down to the gloomy Shevren.
This capacity of presenting ideal scenes of boding forth the forms of things unseen and of gliding the distant landscape with the brightest beams of bliss-containing imagination. Its influence on health we all experience, and its operation in cases is highly conspicuous. Through the potent agency of imagination, even a melancholic turn of mind have supported themselves affected with every variety of disease.

Hope is the next passion of the mind which I will notice, as having very dominant control over the action of animal life. This cordial of the mind diffuses its soothing influence through the bitterest draughts with which the cup of life is dashed. Its soothing radiance is spread over the einmalmed gloom. Comfort, its consolations dispel the weary spirit in the dark hour of bodily languishment. It imparts a renovating energy to the action of the circulation and disease, which adds increased efficacy to the remedies administered.

But in one particular disease, hope itself becomes a most inauspicious indication. It has passed into a medical axiom, that hope springs eternal in the hysteric breast. Its illusion blandishments cheat the poor consumptive patience out of reason, which might otherwise shroud their minds in the prospects of a certain death from their disease. It may have its consolations but they are fleeting and delusive. Hope fills the mind with the visions of restoring health, the reality of which is not foreseen in the least. In a medical point of view, it has a very prejudicial influence, in so elating the patient with an opinion of recovery, that the means are totally neglected, or are negligently employed at the period when they can avail anything in arresting the progress of the malady, that unless the friends interpose and oblige him by their entreaties to call in medical advice, his life is inevitably consigned as a victim to the disease. Thus with the increase of hope in direct battle to the onward march of the disease, the mind of the unhappy individual, like the sun setting in the western sky, when the clouds which gather round his path are illuminated by his departing rays, spreads the colouring of hope over the scene of life, and only when life has
leaved its last expiring breath, will the gay delusions of hope cease to play

its part in the hecule breast.

Joy is the next emotion of mind to be contemplated, in its effect on the system, on the medical point of view. In its most accumulated action, joy has extinguished the suddenness as could a stroke of lightning. The aged door keeper of Constantinople fell upon dead when told of the capture of Corunvalis. But joy when moderate, in the circulation, kindles up a glow of heat over the frame, and invigorates strength into the limbs.

Both hope and joy are employed by the skilled physician in bringing about a return of health. Hope may be poured in full tide into the patient's mind, but joy must be temperately employed, in due measure. In other words, the cheering influence of hope can never be injurious from excess of operation, but joy may overpower the frail system and hurst the patient by a sudden stroke of mental delirium to the grave.

Love is next to be regarded by us in its action on the health of the human structure. Love has been divided into benevolence and personal endearment. Benevolence diffuses a sober placidity over the frame, and is highly promotive of the healthy performance of the system. Personal attachments are probably more healthful character, as the relation subsisting between the persons moves the feelings of personal friendship are salutary on their operations. Parental love, especially the mother, is one of the most powerful passions of nature. The Roman matron, who died in her son's arms when his return home from battle, after a report of his death, is a striking specimen of the overwhelming agitation it sometimes induces.

But the love between the sexes is most potent in its disease and agency on the system of both man and woman. Shakespeare's Viola is a good representation of what is experienced by a delicate and cultivated mind under the first influence of this passion. The never told her love, but concealment, like a worm in the earth, feed on her damask cheek; she pined in thought. Man, whose mind alternately actuated by other interfering passions, such as love of money, ambition, and love of pleasure, may escape the deteriorating influence exerted by love not.
associated on the health. True moderate love is inclined towards an object, whose heart
beats in unison with the emotion thus felt, whose hope can animate the mind
with the prospect of a happy consummation, then instead of preparing it major-
to the action of life. But disappointed love, where the soul is “suckled on with
the pale cast of thought,” often induces mania consumption and may other afflic-
tions and dangerous diseases.

Jealousy, which results from ill-regulated love or which arises from a dim-witted disposition
where the passion of love is despotic and corroding feeling of the soul, it
is precious oil that makes the food it feeds on, and produce jaundice dis-
sease and infiltrated melancholy.

Anger is the last passion that I will consider, it is the most destructive one
in which ever preyed upon the peace of the mind, which, in its diversities
changes produces more misery in society than all the rest, and which has more
quickly quenched, with infectious violence, the vital spark, than any other emotion.

There is in short madness, it acts on the whole frame, the heart is raised into
violent pulsation, the limbs are convulsively agitated, and augmented in vigor; and the
nervous system vibrates with electric fire. The plucky soul is the consequence, which
reclimates the unhappy individual into immediate death.
An Essay on Rheumatism

Presented to the Provost, Trustee and Medical Faculty of the University of Maryland
for examination by H. M. Smith, a candidate for graduation

March 26th 1831
On Rheumatism

Of this disease there are two kinds, the acute and chronic. In the acute form of this disease, it appears to be, often inflammatory in nature, the causes which produce it are cold, applied to the body, when any part of the body, is exposed to cold, and the other, when the application of cold is long continued. As, it is taken off, or damp clothes are applied to the body, these causes may affect persons of all ages, but the rheumatism seldom affects either very young or elderly persons. It most commonly occurs from the age of puberty, to that of thirty-five, or forty years of age. This disease is frequent in cold, and more uncommon in warm climates. It most frequently makes its appearance in autumn, and spring, it is less frequent, in winter, when the cold is long continued, and rare, it is very seldom, during the heat of summer. It may occur, at any season, if the vicissitudes of cold, and heat, are frequent. These causes may affect persons of any constitution.
but, most frequently, affects those of a sanguine temperament. 
This disease, is particularly distinguished, by pains, affecting 
the joints, for the most part, the joints alone, but, sometimes 
affecting the muscular system, very often, the pains, affect 
the bursa, by shorting along the muscles, from one joint 
to the other, always increased, by the action of the mus-
cles, belonging to the joint, or joints, affected; the large 
joints, are most frequently, affected. Such, as the hip, and 
kneis; it sometimes affects the shoulder, and elbows, the 
ankles, are sometimes affected; but the smaller joints, 
such, as those of the fingers, and toes, seldom suffer from 
the effects of rheumatism. This disease, although, sometimes 
confined to one part, of the body, only, yet, it may fre-
quently be found, in many parts, of the body. When 
it appears in the cold stage, it is immediately succeed-
ed, by other symptoms, as pyrexia. It is particularly 
attended, by a full hard pulse. The fever, is sometimes 
found, before the bursa is troubled, by pains, but more 
frequently, pains are felt, in particular parts, before any
Symptoms of fever, appear. When, no fever, appears, the pain, is sometimes, confined, to one joint only, but, when, any considerable degree, of pyrexia, is present, although, the pain, may be, in one joint; it seldom happens, but that the pain, affect several joints, at the same time, but, for the most part, shifting their place; and having abated, in one joint, become more violent in another, they do not commonly, remain long, in one place, but, frequently, shifting, from one joint, to the other, the disease, frequently remains, a long time, in this situation, shifting, from one part, to the other, the fever, attending this disease, has an exacerbation about night, and is most considerable, during, the night, from which the pains become, more trouble; some, the pain, is frequently made, more violent, by being, cowed, too closely; and causing more heat than necessary. Joints after having been affected, for sometime, commonly become red, and swollen, which
is painful to the touch; the swelling, frequently, relieves the pain. This disease is sometimes attended, with sweating; it occurs early in the disease, but is seldom fee or copious. The sweating, frequently has a desirable effect, in relieving the pain. In this disease, the urine is found, coloured, in the commen-
cement. It is without sediment; but, as the disease advances, and the fever has more considerable un-
certainty, the urine, deposits, a calcititious sediment; when
blood has been drawn, in this disease, it gives an
inflammatory appearance. The acute rheumatism,
though, it has so much the nature of the phleg-
matic, it differs from them all, that is, not hav-
ing, a tendency to terminate, in convulsion. This
termination, almost never happens, in rheumatism, but the disease, sometimes, produces, effusion of
a transparent jelly like fluid, into the sheaths
of the tendons, it rarely happens that the fever con-
issues, to be considerable for more than two, or three weeks, while the fever abates insensibly, if the pains of the joints continue, they are less violent, more limited, being confined commonly to one, or more joints, when the fever attending rheumatism, has entirely ceased, when the swelling, and particularly the redness, has disappeared; but when the pains still continue, to affect certain parts, which remain stiff, which feel uneasy upon motion, or is affected by change of weather, then it may be called chronic rheumatism. as it continues for a very long time, the distinction, between the two forms of rheumatism, are not always marked. when the pains are still ready to shift, their place, when they are worse in the night, also attended, with some degree of fever, and with some swelling, and particularly, redness of the joints, the disease may be considered to be pertaining, of this acute form. but, when, there is no degree of fever, remaining, when the painful joints, are without redness, when they are
cold and stiff, when they cannot be made to sweat; or, when while a free and warm sweat is produced, it is clammy and cold, on the painful parts, and when especially, the pains of the joints, are increased by cold; and relieved by heat, applied to them, the case may be considered, to be of a chronic form. This form of rheumatism, may affect different joints, or, seldom affects those joints, which are surrounded by many muscles; and those, of which the muscles are employed in the most constant, and vigorous use, such as the vertebra of the spine. This affection is called lumbargia. Violent strains, and spasms occurring on a sudden, and violent exertions bring on rheumatism, which at first partake of the acute form, but soon become chronic. With respect to the proximate cause, of rheumatism, there has been various opinion. It has been imputed, to a particular aetiology, with respect to the proximate cause. This is thought to be impossible. However, a disease of a chronic nature may be produced, by an acid matter applied to the veins.
a rheumatic affection may arise from a carious tooth. It has been said, the primary cause of rheumatism, has been supposed to be, a deposit in the fluids, obstructing the vessels of the part; this opinion does not appear to be correct. It is more properly thought, to be the same, with that of other inflammations, not depending, upon direct stimuli, in the case of inflammation, but in rheumatism, it is thought the most common remote cause, that is cold, applied or acting especially upon the vessels of the joints, from those being supplied by cellular tissue, than those of the immediate parts of the body of a limb. It is also supposed that the application of cold, produces a constriction of the arteries, on the surface, and at the same time, an increase of tone, or phlogistic diathesis, in the course of them, for which arises, an increased impetus of blood, and at the same time, a resistance, to the free passage of it. By this forcibly inflammation and pain, the cause of rheumatic seems to be, analogous to that of inflammation.
depending on an increased efflux of blood to the part, while exposed to the action of cold. There seems to be also in the case of rheumatism, a particular affection of the fibres of the muscles, the fibres appear to be, under some degree of rigidity, therefore, to be admit of motion and pain is immediately produced upon exercise. It is an affection of these fibres, which give rise to the propagation of pain from one joint to another. The pain is more severely felt in the extremities of the muscles, in the fingers in the joints. The affection of muscular fibres attending rheumatism, seems to explain why, strain, and spasm produces rheumatic affections, and shows that with an inflammatory affection of the vascular system, there is also, in rheumatism, a particular affection of the muscular fibres, which has a particular share in producing the phenomena of the disease. In acute rheumatism, which does not arise from direct stimuli, there is an inflammatory affection of the parts, and a phlogistic diathesis, of the whole system and upon these is founded the method of cura...
The cure therefore, in the first place, requires an antiphlogistic regimen, and particularly, abstinence, from animal food, and all fermented liquors. The diet should be of the vegetable kind; and the plentiful use, of bland, diluent drinks, in the acute stage, of the disease, than is generally, more relief, from blood letting, than any other remedy. The blood should be drawn in large quantities; and the bleeding may be regulated, in proportion to the frequency, fulness, and hard- ness, of the pulse, and to the violence, of the pain. The bleeding, should not be too severe, in the first of the disease, as to produce too much debility, for fear of producing, a slow recovery, and giving the disease, a chance turn. To avoid that debility, of the system, which general bleedings, on optic to occasion, the pain, may often be relieved, by topical bleedings, especially when the swelling, and redness, have progre- ssed, or of a joint, the pain may be amply certainly relieved, by such bleedings, but as the continuance of the
disease, seems to depend, upon a phlogistic diathesis of the whole system, than upon the effect of a particular part; or topical bleedings, will not supply the place of general bleedings, to take off the phlogistic diathesis prevailing in this disease. Authorities may be useful, if produced by medicines, which do not stimulate the whole system, such as mineral salts, and which have in some cases, a soporific or power. Surgeon is not so powerful as bleeding, in removing the phlogistic diathesis, and when the disease has become general, and violent, frequent stools, an inconvenient, and even hurtful, by the motion, and pain, which they occasion, in acute rhematism, applications to the affected parts, are of little service, for solutions rather aggravate the disease, in the early state, but subcutaneous and emulsion, are frequently effectual, in relieving the pains. Blistering, applied to the painful part, may be effectual, in removing the pain from it. They are of little service, only when the pains are much confined.
to a particular part. After some general bleeding, to take
off the phlegm, phlegm, phlegm, may be used, advan-
tagonized; sweating, provided it be used at the proper
time, and from a valuable remedy. Fibrin are injurious,
when the spleen is in a high degree of fever, opium,
except when they are directed to produce sweat, al-
ways prove beneficial in every form of this disease, back,
sometimes may be employed in cases, when the phle-
gistic diathesis is much abated, and, when the
exacerbations of the disease, are manifestly periodic,
with considerable sumptuary interposed, colon and
other preparations of mercury are useful, in the chronic
rheumatism; in the chronic form, it is necessary to ad-
minister the activity and vigor of the vital principle, in the
part. The remedies in this form of disease, are either
internal or external, the external are the application of
heat; by keeping the part well covered with flannel, and
by supporting the heat, by either a drug or balmed form, the diligent use of the flush brush, or other means of friction, the application of electricity in sparks, or shocks; the application of cold water, by fomentation, or immersion; the application of essential oils, of the most warm, and purgative kind. The application of salt or bismuth. The employment of exercise, either of the part itself, or far as it can easily be made, or the whole body, by riding, and many other modes of agitation. Cold water, applied in the form of a shower bath, if it does not produce chilling, but if succeeded by a pleasant glow on the skin, has been found very useful in chronic derangement. It gives time to the skin, stomach, and whole system, bandaging the whole limb, or part, with flannel, cloves, moderately tight, proves very useful. It gives support to the muscles of the part, also aids the circulation in them. Prevents the indulgence of fatigue, and unites to them lost time. It also aids in producing inspiration: the internal remedies
are essential oils, drawn, from resinsous substances, such as turpentine, and various other volatile alcohols, etc. They are other medicines useful to produce sweat, colo- mel and other preparations of mercury in small dosis for some time continued have been used with success.
An essay on the Physiology of the Lion
presented to the Provost, Trustees, and Medical
Faculty of the University of Maryland for
examination, by Robert C. H. Grymes a can-
didate for graduation, March 26th 1838.
It seems almost unnecessary to repeat a truth so obvious to everyone the importance of that branch of Medical Science which is called Physiology, to every individual it is a subject of interest and gratification; but to the Physician it is a subject which combines interest with utility. It has been defined the Science of Life, and in conjunction with Anatomy may be said to constitute the basis of Medical Science. It is by a knowledge of the body and its functions in health that we arrive at correct ideas of Pathology, since this is nothing more than an alteration of these functions from their healthy condition. While we consider the many improvements which all the other branches of this Science has undergone it is pleasing to see that this very important one has not been neglected, and although there are yet many dark points, while we are encouraged to cherish the sanguine hope that the time will come when all darkness shall cease and one universal light will be reflected through out the whole science of medicine.
On the Physiology of the Liver

To the student of Medicine there is perhaps no part of the animal machine which affords a subject of more interest, more from its peculiarities more calculated to attract his observation than this viscus. It is situated in the upper part of the abdomen in the right hypochondriac region, and is retained in its proper situation by reflections of the peritoneum called ligaments and by the compression of the abdominal muscles. The general figure of the Liver is that of a concave convex body presenting a lobulated appearance which has induced anatomists to divide it into five lobes. These lobes are formed by the intersections of as many pulci or fissures. Attached to the inferior portion of the right lobe is the Gall bladder, of a pyriform shape which serves as a reservoir for its secretion. The Liver is a very vascular gland, having besides the Hepatic artery and Vena cave, the Vena portae its great peculiarities taking its origin from all the Hepatic peculiar viscera, and distributing itself through out its whole substance. Physiologists have doubted from which of these the bile was secreed, it seems now however to be pretty generally allowed that the object of this former is to afford nourishment, while the latter
affords it its secretion. The nerves of the Liver are received from
the Hepatic pleura, sent off from the great Sympathetic; hence
may be accounted for those symptoms which so peculiarly char-
acterize its diseases. By a minute inspection of the Liver it will
be observed that it is composed of myriads of granulations which
have been called Acini; the nature of these bodies was long made
a subject of controversy between Malphigi and Pippach. The for-
mer contended that they were simple glands collected on
of the Ducts
the ramifications, the latter that they were merely Vascular
whether it be the one or the other, it is well ascertained that
these are the proper secreting parts, from which secretions take
originate for the purpose of carrying the secretion from them
into the Hepatic duct, by which it is taken into its receptacle
the Gall bladder. Now that we have considered its situation
its peculiarities and structure it is natural for us to in-
quire into its use. Considering its great size and at the same
time how generally it is supposed to be common to sal-
ivorous animals as the heart itself we cannot doubt but
that it is of great importance in the animal economy.
Various opinions of its functions were entertained by the
olde Physiologists and indeed those of the present day
do not seem to coincide in this point. Let it suffice that
for the present to observe that its immediate function is the secretion of the bile; for which purpose as I before mentioned, the
bile duct is seen ramifying throughout its whole substance. And
now a question arises, whether in this secretion useful in the
animal economy? It is entertained by writers generally on this sub-
ject that it acts a very important part in the process of di-
gestion. I will not pretend to say that it is entirely useless in
this process, but I am induced by very high authority, our
distinguished professor Dr. Wells, to consider it rather as an ex-
cremental or emollient fluid, serving this purpose only second-
arily. We are told that by its action the biliary system and
alimentary canals are stimulated to perform their respective
duties. In the consideration of this subject we are unanswer-
ably led to view the operations of Nature, we are led to ask the
question why also so twice in six her works should they have
constructed man perfect in all parts with an incapacity
of performing their individual functions without adven-
titious aid? Is it Pains like a law of nature that this de-
gastic apparatus so beautiful and perfect in its structure
should be incapable of performing its functions without the
additional aide of a stimulating fluid, which stimulus is
acting upon it as a catharsis (if you allow the expression)
from birth to the end of existence?
But we are carried to disease to prove its utility, for we told this in the disease called Jaundice the alimentary canal becomes torpid, unable to perform its peristaltic motion. This is very true, but may not this be the effect of a sympathy with the general disease? And here I will add if this bile is of so much importance in stimulating the digestive apparatus, how is it that in this disease patients have been known to labour under age months and yet the system receive nourishment, are the sympathies idle all this time for want of stimulans? And if we go a step further in Pathology we find a disease called Syphenteria in which there is no discharge of bile and in which the peristaltic motion is unusually active. In what then it may be asked does its remuneration properties consist, I am disposed to think from the circumstances of the Biliary duct emptying itself at height up in the alimentary canal, that it has an action in the process of chylification; for it is just here we see this process taking place. Far be it from my intention to consider this an unimportant gland, indeed although I must consider it of such vast importance in the process of digestion, I am persuaded that it acts a part equally important to the system. Will it be asked in what this action consists?
Seeing as I before said the blood, after returning from the whole abdominal cavity charged with venous blood, the answer almost immediately suggests itself, the blood on its return to the heart saturated with carbon and hydrosulphuric is brought here in order that it may abstract from it those impurities, which are not only offensive, but which cannot not remain in the system, without proving exceedingly injurious to it. By adhering to this free economy I think we will have its functions more plainly developed. Why we are first led to ask is this great disproportion of viscera? Why such an immense gland for so small a body? Will it be said that it is for the purpose of secreting blood to aid the digestive functions? May we not more reasonably conclude, that it acts a more important function, by depriving the blood of those impurities which it has been said to contain. Thus I am led to consider this a supplementary organ to the lungs, that it assists them in effecting this change upon the blood, the importance of which change must be obvious to every one.

If we descend lower in the scale of animal beings I think we will see more plainly the truth of such a proposition. Do we not see throughout creation, animals that have lungs, have comparatively small
Liver and vice versa, hence it is that amphibious animals which spend a greater part of their time under water had immensely large livers the functions of the lungs being necessarily suspended while in this situation.

By experimentalists we are informed that in hibernating animals (which shut themselves up in their habitations during the winter season) the secretion of bile is always going on, it cannot be said in them it answers the purposes of digestion, since they take no food in this mean time; from these examples of comparative physiology we draw the inference, that the Liver possesses important functions in the animal economy, which function I consider is the purification of the blood.
An
Inaugural Dissertation
on Gastritis
Submitted to the examination of the Provost, Medical Professors, and Trustees of the University of Maryland
At a public commencement held in the city of Baltimore,
For the degree of Doctor of Medicine
On the 5th day of April 1830
By Howard McDouald
of Maryland
"Presta principiis vero medicina paratu
sine mala perlongae invaluere moras
Gastritis

Inflammation of the stomach, is divided by Sullivan, into two kinds, Phlegmonous, and Erythematic.
The first he says may be seated in the nervous coat of the stomach. The second he observes is always seated in the villous coat and cellular texture immediately subjacent.

Professor Potter thinks this distinction unnecessary, as one part involves another. When inflamed, it affords me great pleasure to agree with this distinguished gentleman, in his opinion on this subject.

It will not be my design in this essay to treat of Phlegmonous and Erythematic inflammation separately, as it is of little importance in a practical
point of view to distinguish one from the other, both requiring one and the same treatment.

Inflammation of the stomach, or what has been commonly treated of under the title of Gastritis, may be known by an acute pain in the stomach, accompanied with a burning heat. It is not always confined exactly to the region of the stomach, but extends as low as the false ribs, and often shoots to the back. It is not only much irritated by any thing received into the stomach, but even by the slightest external pressure. Those symptoms are also accompanied with frequent vomiting and hiccup.

The pulse in this disease is small, frequent, contracted, more or less hard, and sometimes intermittent.
interesting. The Thirst is urgent and anything taken into the Stomach, to relieve the Thirst is soon rejected.

In Gastritis there is a more sudden and general depression of strength than in any other of the phlegmasiae. It is so great sometimes as to threaten syncope, which in many cases actually take place. The anxiety and anguish referred to the precordia are very great and sometimes among the most distressing symptoms. The bowels are inactive in this disease and are very difficult to be moved when the inflammation extends to them.

There is no complaint with which Gastritis is likely to be confounded. In encreas and flatulent pains of the stomach, the pulse is generally (natural)
natural, or nearly so, now are these affections accompanied with the sudden sinking of the strength which attends gastritis. The increase of pain on receiving anything into the stomach is much less remarkable in flatulent pains and cramps than in gastritis and in the former the great increase of pain on pressure is not to be observed. The hiccup is a more constant attendant on the latter complaint which assists here in distinguishing it.

In spasm of the stomach, the disease most frequently confounded with gastritis, there is such a sense of contraction and suffocation that the voice is often suppressed, while in gastritis it is more free and the cries of the patient are often piercing. Sauvages observes that it is almost impossible
impossible to distinguish gastritis from an inflammation of the epigastric muscles, and it also appears that Quain agrees with this gentleman in opinion. As much as I respect the opinions of those gentlemen, I must beg leave to differ from them. It appears also that the latter has fallen into an error of greater magnitude in saying that a diagnosis between gastritis and an inflammation of the epigastric muscles is of little importance, since the treatment of them is the same. Now the treatment is not the same, since in an inflammation of the epigastric muscles we trust more to local remedies. And in gastritis, the organ affected being of so much greater importance we are called upon to use the most powerful general means.
The Practitioner by a little attention will be able to distinguish between those two diseases. In an inflammation of the epigastric muscles it is true the pain is increased on pressure as in gastritis but it is also increased in a greater degree by the motions in which the epigastric muscles are concerned which is not the case in gastritis. There is also a marked difference in the pulse of one and the other. In the latter the pulse is small as I have mentioned above, but in the former if the pulse is at all affected instead of being small and feeble we have in their stead a strong and full pulse as in most other inflammatory diseases. And also as it regards the irritability of the stomach there is no tendency to vomiting or very little at the
most which is always a most distressing symptom
in gastritis.

Such are the symptoms on which we place
our chief dependence in distinguishing gastritis
from those complaints which most resemble it. And
when the symptoms mentioned are fully developed, there
are few diseases whose diagnosis is more easy. We must
be pardoned here from not noticing the inciency of the
muscles, which may frequently be observed, as there
is often some degree of fullness and tension about
the stomach, in gastritis, and therefore this swelling
would be a deceitful symptom. Having enumerated
all the principal diagnostic symptoms, I deem it
unnecessary to dwell longer upon this part of the
subject (but shall proceed to enumerate the causes
producing)
producing it. The causes of this disease have been
rightly divided by authors into predisposing and
exciting. Those persons who are peculiarly subject to
other inflammatory diseases are alike predisposed
to gastritis. Former habits predispose to this disease.
It is remarked by an author that those of a thin
make rigid fibres and a quick digestion are
delible to inflammatory diseases. But as it is
foreign to my purpose to dwell longer upon this
part of the subject, we may conclude by saying
that whatever tends to weaken or debilitate the
organ also predisposes it to inflammation.

In regard to the exciting causes of gastritis cold
applied in various ways holds a principal place.
Most of the exciting causes of gastritis however
are
are local irritations applied to the stomach. There is no cause of this disease more frequent than taking cold liquor into the stomach in large quantities when the body is heated. Acid matter received into the stomach especially when its mucous has been abraded or so changed as not properly to perform its office may excite gastritis. These substances however that are most acid to the taste are not the substances that occasion most irritation in the stomach. The strongest spices are often taken into the stomach without inconvenience while on the other hand the most injurious matter frequently affect it powerfully. Substances which affect the taste strongly to a certain degree irritate the stomach and if used very freely by those who are (strongly)
strongly predisposed to gastritis particularly such as
have lately laboured under this complaint they may
excite it. It is not at all surprising that we should
find the exhibition of drastic emetics and cathartics
provoking the cause of gastritis as they possess the
peculiar power of irritating the stomach.
So these causes of gastritis we may add that
there is a numerous class of poisons which seem to act
by exciting inflammation and ulceration in the
stomach. But the limits of this work will not
permit me to enlarge upon this division of causes.
I will therefore proceed to enumerate but a few
of them. Among the most important of which are
Convivium Sublimatum, Arsenic, muriatic Sulphuric,
and Nitric Acids.
(There)
There are certain articles of diet that irritate this organ during digestion. Animal food occasions more irritation than vegetable, and young animal flesh more than old, as the young is more difficult to digest. That irritating and intoxicating liquors have a tendency to excite gastritis, I believe is generally admitted. Fermented liquors frequently often excite it in those who are liable predisposed, and a very small quantity is sufficient to occasion a relapse. Acid matters generated within the body may give rise to gastritis as sometimes happens in ulcers or affections of the fauces and esophagus.

There are few things which apply a stronger irritation to the stomach than over distention. When an unusual quantity of food of difficult digestion...
received into the stomach so as to keep it distended for a considerable length of time inflammation of the organ may be the consequence.

Thus are various mechanical causes that produce this disease. A blow on the region of the stomach wounds in the stomach or neighbouring parts and the pressure of the uniform cartilage when it is luxated or fractured so as to press on the organ is said by respectable authors to have produced this disease.

It may also be excited by the various causes of sudden plethora, such as the suppression of hemorrhages or other habitual evacuations. Inflammation of some neighbouring part may spread to the stomach, so as to produce this disease. (particularly)
particularly that of the oesophagus and duodenum.

Such are the principal exciting causes of gastritis. There are some others which might be mentioned but I think it unnecessary, and shall therefore proceed to a more important part of the subject. But before entering upon the more important part, viz. the treatment I deem it essential to make a few remarks on the prognosis.

In forecasting the termination of this disease, it becomes us to pay particular attention to the symptoms, as they are to the practitioner, what the maps and charts are to the navigator. There is but one termination which can be looked upon as favourable, and that is resolution, which is known by the general mildness of the symptoms, and particularly
particularly their yielding to the proper treatment. But on the contrary when the symptoms run high and suffer little or no remission on the use of bloodletting and other means for moderating inflammation, we have great reason to fear an unfavourable termination of the disease.

There are however other terminations of this disease, such as suppuration and gangrene. It has also been remarked by an author, that gastric terminations in ulcers and cancers, if this celebrated author's opinion had been the reverse, I would have readily reconciled to it.

Suppuration may sometimes be looked upon as a favourable termination when ever the abscess opens into the cavity of the stomach, but on the other hand
hand an unfavourable issue may be expected. A
tendency to suppuration which is a rare termination,
may be known by the symptoms continuing without
any considerable remission, and at the same time
with no great degree of violence for one or two
weeks or longer.

When an abscess is formed it may be known
by a considerable remission of the pain, generally
preceded by rigours. But there is a sense of weight
and anxiety about the precordia which harass
the patient very much. The frequency of the pulse
is at first abated, but soon after it is again
increased, with frequent cold shiverings and with
marked exacerbations in the afternoon and
evening, followed by night sweatings, and other
symptoms
symptoms of hectic fever. These at length prove fatal, unless the ulcer open into the cavity of the stomach, the pus be evacuated by vomiting and the ulcer soon heal.

The termination of this disease in gangrene is always fatal. The tendency to gangrene may be suspected from the violence of the symptoms not yielding to the remedies during the first day of the disease. And when gangrene has taken place it may be known by the remission of the pain, the pulse at the same time becoming more frequent and feeble, and the anxiety and debility increasing, with cold, clammy, and partial sweats.

Dr. Wilson remarks, that in visceral inflammation...
Where the gangrene occupies but a small part of
that which is inflamed, the pain often continues to
the last. In these circumstances it is more difficult
to ascertain its presence. This may generally be done
however, buy our attention to the other symptoms.

Dr. Wilson further remarks besides the
terminations which gastritis has in common with
the other phlegmance, it seems sometimes to prove
fatal in consequence of the extreme irritation of the
system which it occasions: "From the sensibility
of the stomach, and its communication with the
rest of the system, And Dr. Cullen observes it
would seem that the inflammation of this organ,
by whatever causes produced may be attended
with fatal consequences in particular, by the great
\( \text{(debility)} \)
debility which such inflammation, suddenly produces, it may quickly prove fatal without running the common course of inflammation. Respected authors say that gastritis induces sudden death with convulsions, before any of these terminations can take place.

General convulsions are mentioned by many as a frequent symptom of gastritis, and that they proceed sometimes from the presence of inflammation in so sensitive a part cannot be doubted; for this we have the authority of respectable authors, but in my few the majority of cases in which they supervene, the disease has arisen from poisons received into the stomach, and the convulsions are more frequently the consequence of these being (taken)
taken into the mass of blood, than of the gastritis, which they occasion. The combination of gastritis and worms, in children may also have contributed to strengthen the opinion of convulsions being a symptom of the former complaint. With these remarks on the prognosis of gastritis I shall proceed to the treatment of this disease.

The treatment of gastritis, first attempted by blood-letting, the blood should be taken in small quantities and the operation frequently repeated, when the pulse rises. We are not to be deterred from bleeding by the smallness of the pulse, for after bleeding it commonly becomes fuller and softer.

It is said that the neutral salts, in solution can be longer retained on the stomach than any other (purgative).
purgatives which might be tried in every case of this disease but generally the stomach is so irritable that no purgative can be retained on the stomach sufficiently long to have the desired effect and we have to purge chiefly by means of active injections. The patient's drink should be any mild such as simple tepid, a thin mixture of gum arabic, sweet milk diluted with tepid, and these should begin in small quantities at a time. The warm bath is used in this disease with very great advantage after bleeding, the patient should be repeatedly immersed in it when the symptoms require it. If it should not be convenient to use the bath we must substitute warm fomentations which should be applied to the whole of the abdomen.
Blisters should be used after the inflammatory symptoms have been subdued by the remedies above mentioned. Local blood-letting recommended by authors in this disease, but I think general bleeding is to be preferred when the system will bear it. Diaphoretics have been found useful in the second stage of gout by their causing a determination to the surface the purulent matter of the internal organs. Those found to answer best in this disease, are the saline mixture, given either in the state of effervescence or after it is over, mercurial fomentations are said to be very useful diaphoretics in this disease.

Opiates in whatever manner exhibited, are very

harmful during the first day of this disease, but when its violence shall have abated, and when the violence
of the pain and vomiting, occur at intervals only, opiate
given in glysters may be cautiously tried and
sometimes have been employed with advantage.

The bad effects of opium in this disease, does not proceed
from any local action on the inflamed parts but
from its increasing the vis a turgi.

When this has been sufficiently reduced, and
there is consequently little or no hardness remaining
in the pulse opium is employed for the purpose of
allaying pain and irritation.

When this disease arises in consequence of
poisons taken into the stomach, it is necessary to
promote vomiting by the use of mild muilaginous
and oily fluids, till there is reason to believe that the
offending cause is removed. While these promote
(continuing)
vomiting they defend the stomach against the
iritation of its contents. If we are acquainted with
the antidote which cancels the noxious quality of the
poison, immediate recourse must be had to it. If
the poison be calomel or sublimate, we should make
use of the white of eggs, and if it should be tartar
vitriol, the yellow bark should be given. If a
tendency to suppuration in this disease is to be obviated
by the remedies I have mentioned. After a certain
duration of the disease, it cannot be prevented
by any means whatever, and when actually
begun must be left to nature; the business of the
physician being only to avoid all irritation.
A tendency to gangrene can be obviated
in no other way than by the means suggested
(above)
above employed early in the disease and when it does actually supervene admits of remedy.

Finis
An Inaugural Dissertation
on Hepatitis
Submitted to the trustees and faculty of physic in the University of Maryland
For the degree of Doctor of Medicine by Wesley Conaway of Maryland
March 20th 1830
Perhaps there is no disease in the whole nosology to which the practitioners is more frequently called than Inflammation of the Liver, and about which there is some difference of opinion as respects the manner of treatment. There is no organ in the body whose functions are more easily disturbed than the liver; it is the largest gland in the body being more voluminous than the lungs when in a state of expansion; it serves as a point of termination for the blood of the abdominal viscera in the same manner as the lungs do for the general circulation; and from its great volume there is no doubt but that it is appropriated to some other purpose than merely to secrete the bile; for it is discovered in the embryo before any of the other viscera and in the fetus it is much larger in proportion than it is after birth. and why should it be so if not it were destined to perform some important function in the fetal state. But it is not my intention to enter into the general utility of this organ only to expunge a belief that at some future period it will be discovered to perform some other function than merely to secrete the bile.
The connection between the brain and liver is observed by the practitioner in all disturbances of the functions or structure of the bilary apparatus; none presents to us a more regular diagnostic than pain in the head or some other mental disturbance attending the disturbance of this important organ; and vice versa when the head receives a blow, disturbance of the liver frequently follows and sometimes finally terminates in an abrupt as has been budgeted by M. Biot an eminent military surgeon. A very intimate connection appears to exist between the liver and lungs by nervous communication; this communication is performed by the paravagum and sympathetic; the paravagum supplying the lungs and stomach, and sending branches to the semilunar ganglion formed by the sympathetic, and this ganglion supplying the liver, and they holding correspondence, in this way the livers become affected.

When we behold the size of the liver in the fetal state as well as in the adult and examine the singularity of its circulation compared with the other organs of the body, its extensive vascular connection the functions it is intended to perform and on the due performance of which depends so much and in so great a degree the perfect health of the body we are at once
compelled to admit that it is destined to hold a commanding
influence over every other part of the body; and that when it is
out of order, discord and want of agreement attend on every
operation of the human system.
Perhaps there is no disease to which the human system is more
subject than this; and if permitted to run its course will
soon involve its important and adjacent parts either by
immediate contact or sympathetic connection; therefore it calls
for quick and active remedies to retard its progress; and if not early
stayed it will be insurmountable by human art. This disease
like most other inflammatory affections is divided into acute and
chronic; but it is my intention only to treat of the acute
form. Some controversy still exists concerning the part; the pri-
tenue or spleen agreeable to some able men is most liable to the acute
form; if it be so there is no doubt but the disease may occasion-
ally extend to the substance of the liver.

The causes which involve the liver into disease are very
numerous, cold is the most frequent of other inflammatory disease, but
not the most frequent of this; for it is (like all other abdominal
disease) a disease of warm climates, however it is thought that
cold may from its violent and sudden effects so debilitate the
organ that it will be incompetent to recover itself
without medical aid; not by acting directly but indirectly
in producing a sudden change in the temperature of the
system, by driving a greater quantity of blood to the large
vessels of the internal organs, and they at last become disabled
to relieve themselves of this unusual supply of blood. finally
congestion takes, creating an instability in the parts, and if not
removed, inflammation and fever will follow. Sudden vicissitude
of weather from heat to cold will frequently produce this disease,
not being able to withstand the shock consequently lies prostrate
from the injury done by the cause. Heat is the most frequent
cause of this disease in hot climates, and it sometimes very sud-
denly runs into suppuration. Dr. Clark relates a case in which
suppuration followed the inflammatory form in five days after the
disease took place. Another very frequent cause is marsh effluvium;
it makes a great and sudden impression upon the liver, impair-
ing the brain and nervous system, consequently producing con-
gection, and if not removed, disease finally takes place; but if
prompt and proper means be employed in the first instance
the organ will very probably be restored without much difficulty
For acting with some energy may so impair the organ as not to be able to recover itself without medical aid. It is said by some that anger increases the secretion of bile and fear has an opposite effect, one producing an increased the other a diminished secretion, therefore its function is deranged in both cases. Partial applications of cold or wet when the body is heated or overfatigued by violent or unaccustomed exercise will be found very frequently to be the exciting cause of this disease, though external injuries have been known to produce it.

The symptoms which characterize this disease are pain in the right hypochondriac region, shooting to the back and shoulder generally very acute, and increased by pressure, white and dry tongue, humid respiration, and difficulty of lying on the left side, irregularity of the bowels and cough. The cough may be produced by the inflammation extending to the diaphragm and spreading along the pleura. Difficult respiration increases pains though it does not always produce cough, and very frequently this last symptom does not appear till the second or third day of the disease.

This disease begins either in the membranes or substance of the liver; but to the practitioners it makes but little difference which
part it begins in, for it is abundantly obvious that in a
large majority of cases the latter structure becomes girded and
in a great extent involved in the disease, and the symptoms
which characterize the substance of the liver are nearly the
same as when its membranes are diseased but in addition to
them some degree of swelling is to be felt externally, the pain
is more obtrude than when the capsule is affected, the urine is of a
dep saffron colour, the tongue is coated with a yellow fur the
pulse frequent hard and sometimes full, the skin hot and dry,
frequently accompanied with nausea and vomiting generally
in the morning after rising, not from inflammation but from
instability of the stomach, wandering pains in the floating
and
evisceral slight pain at the end of the sternum, when pressed
upon.

The manner of treating this disease is nearly similar to the

treatment of all other inflammatory diseases, when it is of colder tem-
perate climates and when confined to the investing membrane
of the liver, it is to be conducted upon the same principal as
inflammation attending the perilonal covering of the peritoneum.
Bleeding is the most important remedy and should be carried
to a full extent, the expiation of pain should be considered the
measurement of the quantity of blood to be extracted; the first bleeding should be large enough to make a sensible impression upon the severity of the disease. The employment of magnesia in small doses is here of essential benefit to correct the acidity of the stomach; this is then to be followed by a dose of calomel, giving the liver time to free itself of its confined secretions; then if pain and inflammation continue bleeding should be repeated as often as is necessary, and the purgative treatment continued with neutral salts till the patient feels not a vestige of the disease. If the debility should be too great for general bleeding, leeches and cupping should be used, the number of leeches and the quantity of blood to be abstracted as to be according to the state of the patient. Our reliance for a recovery in this disease depends upon the active influence of the antiphlogistic means. Calomel is an important remedy in this disease; it admits to the biliary ducts their deprived secretion which is confined by the inflammatory state of the liver. Purgatives appear to lessen inflammatory action by removing the topos which exists in the system and lessening the quantity of blood by evacuating a serous fluid and thereby promoting the biliary secretion. When the bowels are obstin-
[Handwritten text not legible]
atly coetive gamboge or aloes act very well. In ordinary cases
cooling purgatives, as the saline preparations are preferable to any
other. After bleeding and the prima via have been drained out,
and pure and dry hot skin continue, diaphorotics should be
employed, they aid the system in relieving itself of noxious
principals, a first nature in casting off the cutaneous exhalations
which are not fit for the purpose of the animal economy;
which if retained would be a source of morbidish irritation.
Blisters should not be applied except in a state of debility where
bleeding cannot be resorted to, in this case they may be applied
with great advantage, but they should be kept open for sometime
and if they should heal too promptly reapplied them. At the time
these remedies are employed, particular attention should be
paid to diet, all elements of an indigestible nature should
be despised with, no strong meats, no preparations of diet
that have in its composition fatty or oily substances, avoid all
spiritious liquors, and pure country air should be had.
Suppuration will frequently follow after all medical aid has
been resorted to, it may ultimately prove fatal or it may not:
The symptoms which characterize this state of the disease are
exacerbation of pain, chill hectic flushes, night sweats, and dizziness. If the abscess point towards the diaphragm it will produce cough and difficult respiration, by preventing the natural expansion of the chest; if towards the stomach considerable of gastric disturbance will take place, producing instability and finally vomiting to an alarming degree; if it should burst within the walls of the abdomen, and there be a large quantity of matter deposited in that cavity, and the patient much debilitated it will very probably terminate fatally. Adhesions sometimes form between the liver and intestines (principally the colon) and the matter is forced in that intestine and discharged by stool which is a very favourable termination. Very frequently an adhesion to the peritoneum takes place, and an external abscess makes its appearance which is favourable; it should then be opened by art, for in most cases perhaps if left to the spontaneous efforts of nature the constitution would be destroyed before the discharge could be effected. The evacuation of nature should be followed by nutritious diet, pure fresh air, quinine, mineral acid, and other powerful tonics should be promptly exhibited.
An Inaugural Dissertation
on
Hepatitis

Submitted to the Examination of the
Provost, William Smith, L.L.D., Provost
of the Trustees and Medical Professor of the University of Maryland.

For the Degree of Doctor of Medicine on the day of April 12th, one thousand eight hundred and thirty.

By
John Henry Bellman,
of Annapolis, Md.
Hepatitis.

On Inflammations of the Liver.

The inflammation of the liver is by bullen divided into acute and chronic.

Of the symptoms of acute hepatitis, like other inflammations, hepatitis makes its attacks more or less suddenly, the patient sometimes complaining of tightness about the precordia, accompanied with a degree of anxiety and fever, for some time before the symptoms peculiar to the complaint show themselves; at other times the pain in the region of the liver being among the first symptoms. In either case the accession is frequently attended with some degree of cold shivering.

The chief diagnostic symptoms of this complaint are the seat and kind of the pains which attend it.

The acute hepatitis is almost always attended with a pain in the hypochondrium, which is sometimes shooting, accompanied with a sense of tension in the part; in some cases it is constant and severe, in others deep seated and dulce. The pain however is not confined to the region of the liver; it extends to the breast, clavicles, and shoulders of the right side, and in the last it is often more acute than in the seat of the disease.

The pain of the hypochondrium is increased on pressure: when the pain is much increased on pressure, the anterior part of the liver is the chief seat of the disease. But when...
the pain extends to the clavicle and chest, the convex part is most frequently affected. When the inflammation attacks the left lobe, the pain is often in the left shoulder. But when the inflammation attacks the right lobe, the pain is in the right shoulder. It is generally most severe when the patient lies on the left side. The pain of the side, as well as the shoulder is often increased during inspiration, which is impeded by it. As might be supposed, it is most so when the parts lying nearest the diaphragm are inflamed. It is in these cases that the cough which accompanies this complaint is most severe, and that hiccup most frequently supervenes. The cough is generally short, dry and frequent, and the hiccup, which is never a favourable symptom, is sometimes so violent that it almost interrupts respiration.

When hepatitis is attended with cough and difficulty of breathing, it may be perceived how readily it may be mistaken for pneumonia, but it may readily be distinguished by the pain in the former extending upward the shoulder, by the pallorness of the countenance, by the cough being unaccompanied by expectoration, and by the less degree of dyspnoe; the heat and pain not being increased upon taking any thing into the stomach, its being able to retain whatever liquids or medicines are thrown into it, without the immediate rejection of them, and the less prostration of strength, will distinguish it from gastritis. Hepatitis may
be derived from spasm on the gall ducts by there being no nausea, by the pain being permanent; by the pulse being one hundred and upwards in a minute; and by the patient, always preferring to keep the body in a straight quiescent posture, whereas in the greatest case, when there is spasm on the gall ducts, it obtained by bending the body forwards on the knees.

The patient lies with difficulty on the left side; There is looseness and sickness, and often a vomiting of bilious matter. The intestines are generally inactive, and the stools show a deficiency of biliary secretion, or at least of any intermixture of it with them, the urine is of a deep saffron colour, and small in quantity. There is loss of appetite, great thirst, and constipation, with a strong head, and frequent pulse, and sometimes intermitting. The tendency of the patient to resolution as of other similar complaints, is known by the general mildness of the symptoms and their yielding to the proper remedies, particularly by there being little dyspepsia, cough, hiccup, vomiting, oppression or debility. As in other febrile diseases, there are certain symptoms which frequently attend the favourable termination of the patient, amongst these are hemmorhages, particularly those from the nose and hemorrhoids. It is sometimes terminated by sweat, which, when symptoms of jaundice attend, often stains the liver of a yellow colour. As soon as suppuration takes place, the pain resolves, and there is generally a sense of weight and pulsation in the region of the liver, the former being
increased by lying on the left side. These symptoms are attended with frequent and irregular shiverings, and at length with hectic fever. In many cases there is an evident tumour, and fluctuation may be readily felt. Hepatitis though very rarely terminates in gangrene. The tendency to gangrene is known by an unusual violence of the symptoms, rapidly increasing, and not yielding in any measure to the proper remedies. When gangrene has actually supervened, the inflammatory symptoms suddenly, cold; sweats supervening, and the pulse becoming weak and fluttering, with constant hiccup and cold extremities. There is generally a black matter rejected by vomiting, the stools being unusually offensive and of a dark colour, and fits of syncope frequently precede death, which is never long delayed. Schimiss of the liver has generally been ranked among the terminations of hepatitis.

Of the remote causes of acute hepatitis
The remote causes of hepatitis are external violence from contusions or falls, and especially those which have occasioned a fracture of the cranium; certain passions of the mind, violent summer heat, violent exercise, intermittent and remittent fevers, cold applied externally or internally; and therefore in many cases the same causes which produce pneumonic inflammation, produce hepatitis; and whence also the two diseases are sometimes joined together.

Of the treatment of acute hepatitis.
In acute hepatitis, the mode of treatment differs in no material
point from that which we prescribe in other violent cases of ophthalmia. As the disease is obstinate, and unusually rapid in its progress towards suppuration, it calls for practice of great energy. Blood letting, in particular, must be carried, in any case, to an extent not common, and scarcely warranted in other complaints. While the pulse remains full and strong, and the pain in the side, purgative, blood letting is the only remedy on which we can rely. In the mean time, however, it should be aided by copious purging with calomel, quickened in its action by salape and a strong infusion of blessed thistle. The infusion of laurel, with nearly as much of Glaucon’s or Topsoom Boet as it will hold in solution, constitutes also an excellent purgative. While these operations are going forward, cups or bees, or both, should be liberally applied to the region of the liver, and a large blister laid on the same, as soon as the pulse action is sufficiently reduced. But if blistering be resorted to at too early a period, besides standing in the way of topical blood letting, it can scarcely fail on other grounds to be productive of mischief. These remedies, connected with a rigid enforcement of the antiphlogistic regimen, constitute our reliance in acute hepatitis. After the inflammation has been sufficiently reduced, it will be the safest practice to remove the disease entirely by a gentle mercurial stylium, to be continued for some time. Fomentations are more generally employed in hepatitis than in most of the phlegmases,
and are often attended with considerable advantage. A large quantity of any mild warm fluids received into the stomach is often found more effectual than external fermentation. After the inflammatory symptoms have subsided, the strength of the patient is to be restored by an invigorating diet and exercise; and as soon as they can be employed without the danger of a relapse, by tonic medicines, for there are few complaints which leave behind them more languor and debility than hepatitis. It is also very readily perceived, so that it is necessary for some time after the disease is removed, to pay particular attention to diet, and to avoid the various exciting causes of the complaint above enumerated.

of the Symptoms of Chronic Hepatitis.
The chronic hepatitis very often begins with symptoms of indigestion. The appetite is irregular, and after eating, the patient is troubled with acidity, flatulence, and a sense of fulness in the stomach, the countenance becomes pale and yellowish, swollen, sometimes bloated, and the eyes dusky and languid. There is a sense of uneasiness about the hypochondria, sometimes attended with shooting pain, which frequently extends to the clavicle and right shoulder; the pain of the hypochondria and sometimes of the clavicle and shoulder, being increased by pressure on the region of the liver. The pain is sometimes confined to the right shoulder, and sometimes felt chiefly when the
shoulder is pressed, sometimes it is rather an itching than pain. During the course of the disease the patient often complains of pains of various kinds, either dull or acute, frequently attended with a sense of weight or fulness in the epigastric and hypochondriac regions, and with some degree of hardness and tumour of these parts, particularly of the right hypochondrium. As in other cases of indigestion, there is much languor and languidity, with an inclination to sleep. The sleep, however, is seldom refreshing, and often interrupted by dreams. The patient becomes melancholy and fond of retirement. The state of the bowels is very variable, being sometimes costive, sometimes affected with diarrhoea. The stools are at one time of an ash colour, at another yellow, or almost black, and very fetid.

They are sometimes frequent, small, and mucous, the abdomen at the same times being tense and hard. The pulse in many cases undergoes little change, being only more feeble and languid than natural. In some cases it is slower, in others stronger and more frequent. When there is much soreness, as near sure, in the region of the liver, the pulse is more of left hand, particularly in the evening. The tongue is generally sore, for the most parts while and dry, and the gums often become harder than natural. The breathing is generally much affected. A degree of dyspnoea, accompanied with a dry, tearing, cough, sometimes comes on at an early
period, almost always in the progress of the complaint, the shoulders appearing daily more elevated. It sometimes happens that the dyspnoea is unattended by a cough; and more frequently that the cough is moist, the patient expectorating with difficulty, but experiencing considerable temporary relief to the breathing from bringing up a little phlegm or mucus, of which the matter expectorated in this complaint generally consists. Towards the termination it frequently assumes more or less of a prevalent appearance. The pain of the hypochondrium is generally increased during the exertion of coughing. Lying on either side, particularly on the left, frequently occasions uneasiness, and the patient feels his complaint least when he lies on his back, turning a little to the right, with his shoulders gently raised. Acute pain, hiccup, and vomiting, are more marked in the chronic, than in the acute Hepatities. In the former, as well as in the latter, some degree of jaundice frequently appears. These symptoms, with more or less rapidity, gradually increase. Fever shows itself, particularly in the evening, which is soon accompanied with night sweats, emaciation, great debility, and fetid and jaundiced stools. In short, complete hectic comes on in consequence of the formation of one or more abscesses, which bursting, where the least resistance is opposed, generally prove fatal. It sometimes happens as in the acute
Hepatitis, that adhesions are formed between the liver and
pancles of the abdomen, the matter pointing outwardly is
 discharged by the skin, and the patient often recovers. The
chronic hepatitis sometimes runs its course in a short time.
In other cases, it is protracted for months, or even for years.
The chronic hepatitis is a less dangerous complaint than the
acute, if it be not overlooked till a tendency to suppuration
takes place. The prognosis is then the same, and collected
in the same way, as in the acute form of the disease.

Of the causes of chronic Hepatitis.

I need say little of the causes of this form of the disease, since
the same causes produce both the acute and chronic. It
would seem that the frail sanguine constitution is most
subject to the former, the exhausted, and melancholic to the
latter. It is supposed by authors that there is something
in climate which predisposes to the acute or chronic hepatitis
since we find the former chiefly treated of by authors who
practiced in Europe.

Of the treatment of chronic Hepatitis

In Chronic Hepatitis venesection is essential, but must not be
pushed to the same extent as in acute hepatitis. There
exists, however, scarcely any complaint in the course of which
as large a quantity of blood has been taken from the patient
with advantage, as in some cases of that which we are now
considering. "But, as the disease is chronic, such must be the remedies, gradually, but firmly and perseveringly employed. More also the application of caps to the region of the liver is highly useful; but the most important topical remedy is a perpetual blister; or, what is better still, a caustic or a serum. But in the treatment of chronic hepatitis our chief reliance is on a gentle, but continued mercurial stygism. Should the system be likely to sink under this remedy, let it be discontinued, for a time, and then recommenced, and let this plan be steadily pursued, until every symptom of the complaint shall have disappeared. If the case be mild, and the febrile action very moderate, the patient may be allowed to take gentle exercise in the open air. But no one, under the influence of mercury, shall even venture out of his chambers in damp or cold weather. It is to a neglect of this precaution, that we are to attribute the frequent failures of that remedy, and the many injurious effects that occasionally result from the use of it. When exhibited under proper circumstances, there is no remedy more perfectly safe than mercury; nor is there any one more dangerous if used indiscreetly. There are cases of chronic hepatitis in which the propriety of employing mercury is doubtful, particularly where it is combined with putrid fevers and other diseases of much debility.
The use of Mercury in these cases has not been proved either to be hurtful or useful, from what has been observed in similar cases, practitioners have been afraid to make the trial. The good effects of Mercury in hepatitis generally appear as soon as the mouth begins to be affected, and sometimes sooner. When much difficulty of breathing or pain occurs during the mercurial course, as sometimes happens, even where symptoms have previously been very moderate, gentle cathartics and blisters may be recommended, or even blood letting, if it be judged necessary, without discontinuing the mercurial injection. When the foregoing symptoms are considerable, some advise the use of the mercury to be laid aside till they are removed. The fatigue of rubbing in such cases may be relieved, but we have just seen, that Mercury is employed with advantage even in the most acute hepatitis, especially when it acts as a cathartic. In some constitutions the exhibition of Calomel requires much caution. Another remedy which has acquired a high reputation in the treatment of chronic hepatitis, is the nitric acid, it may be given in divided doses, to the amount of from one to three or four drachms in twenty-four hours. A pleasant formula is, to make it into a false with mucilage of gum arabic, mint, or lavender water, and loaf sugar. To succeed in this disease, under any plan of treatment the use of flannel next the skin, and an adherence to the antiphlogistic regimen, is necessary. As a laxative and an
alternative, the long continued use of pills composed of rhubarb
and castile soap, is highly recommended.
An Inaugural Thesis.
On
Phlegmasia Alba Obliterans
Peroperanum;
Submitted to the Provost, Trustees, and Professors,
of the University of Maryland,
for the degree of
Doctor in Medicine;
Of John A. Valiant
of Baltimore.
March, 1831.
Dedication.

On an occasion indebted to our instructors, perhaps—having an opportunity of acknowledging our obligations;—more, however, our like the pleasant presence of the self, a hand a-
and even of common affections could scarcely remain callous to the claims of
from whom we have received many friendship. I would be ungracious,
indeed, did I neglect to tender to the Professor of my Alma Mater my most
est wishes for his health and happiness; and I would be no less ungrateful
could I forget the many useful lessons received from my Preceptor, Doctor Sad
col. As a tribute of respect, I beg him to receive this testimonial,
until I can supercede it with one
of more importance.

Sir A. Paï/gallery.
Phlepama. Alla Oeken Phe.

perannis; - the 'raulou intumeres
of the bones intumity inciders to
lyng--in wom.

Although this disease must
have existed as long as other which
attend lying-in women, still it seems
to have been only slightly noticed
by any of the ancient writers.

The earliest treatises on the subject
of which I have any knowledge
is one which was published by
Mr. Charles White, of Manchester,
England, in the year 1784, whose
idea appears to have been revived
by Jeyes, of Gloucester, in 1792.

Another appears to be one of the
frequent occurred. Mr. White
states that out of 1897 women
delivered at the Westminster Lunatic Hospital, five only were affected with it, and out of 800 who
were delivered at the Manchester Hospital and at Chelsea Hospital, only four were affected with it.
We are told by Dr. White that where
not complicated with any other
disease she has now known it to
terminate fatally, and that it is
observed the skin to be discolored
as to point out the presence of
local inflammation; on the contrary,
it is of a pale white than ordi-

nary, which circumstance has induced
him to name the disease Phlegmasia
Alba Obliterans Purpurea. Some
writers suppose the disease proves to
have terminated in suppuration;
but Dr. White informs us that she
has seen cases terminated in suppur-
ation, as also in death.
This disease has been often
Mentioned by the French writers under the name of "crampes du jambe", et des ouilles de la femme accouchée", or that of "difter du lait", from its supposed cause; but often with so little accuracy, as to make it difficult to suppose what sort of swelling they meant to describe.

By the Germans it is usually called "adenae lactantes".

The superficial swelling of the infant after parturition does not seem to depend upon the kind of labour which has preceded it; either not in respect of its shortness or length of duration, or its occasion. There are some infants which will easily and those which prove difficult, nor does it depend upon any evident peculiarity of the constitution, the corpulent and the thin, the fertile and the strong, being equally liable to it. In appearance it is of size.
Nancy being to denote a disposition to this disease. The swelling of the inferior extremities at that time being of a totally different complaint. Dr. 
Ferand is of opinion that Phleghmatae Johns may exist independently of every 
circumstance regarding constitution, and he does not think it impossible to 
take place before delivery.

Symptoms.

Before the appearance of any swelling, or painful tension in the 
limbs about to be affected, women become very irritable, with a sense 
of great weakness, and previously depressed in their spirits, without any 
apparently sufficient reason, complaining only of transient pains in the 
region of the uterus, and from this the approach of the disease has 
frequently been foretold. After a 
short time they are seized, often 
very suddenly, with an externally
acute pain in the calf of the leg, extending to the internal of the leg, and then observing the course of the lymphatics, stretching up to the skin belonging the internal part of the thigh to the groin, recalling a slight tumefaction over the lower part of the abdomen. The inguinal glands become affected, sometimes the external, which are frequently enlarged, indurated, and painful; and sometimes, the internal, or both; and, probably, also, judging from the lymphs, those which lie at the bifurcation of the vessels at the loins. The whole surface of the swollen limb becomes insufferably tender to the slightest touch or pressure, especially in those parts where the gland are situated; yet without any other apparent change, except that the skin is glossy and of deadly pallor, a certain degree of which not unlike that of a chlorotic
...to drophical poison, as shewn over the countenance, and while blood, every
been seeming to be contained, studded
with blood. When the pain has
continued about twenty-four hours,
the limb begins to smile, and the
pain suddenly abates in proportion to
the increase of the swelling; but
from the moment of the attack, all
power of acting with the limb is
lost, every attempt to move it giving
great torture, and a disposition to
faint. Mr. White looks upon the
swelling of the labium Judæi as
an invariable symptom of the dis-
order, and that asserts, 'that when one
side only is affected, the returner
once is confined so exactly to the
labium Judæi of that side, that
if a line were drawn from the point
to the anus, it would be found near
to go beyond that line in the smallest
degree. We are told Homer,
by O'Neil
that the swelling of the caruncle "pre-
attend" as to be considered rather as
marking the extent, than as tending to
characterize the complaint; and the
positively denies that this particular
symptom is always to be met with;
for some cases had fallen under this
care in which it did not occur.
On this point as well as on most other
relating to the nature and causes of
"phlegmata" dolius these gentlemen do
not agree in opinion. These are,
however, many varieties in the manner
in which the disease commences, as
well as in its degree and progress;
but the glands and sympathies of
the limb are evidently the parts first
and principally affected. In some
cases the accretion of the disease is slow,
and the symptoms less violent, hesi-
ating, as it were, whether it should
be formed or not. In other the "pain
is not only less severe, but diffused,
over the limb, instead of being fixed on particular parts, and the swelling scarcely sufficient to draw attention. The extremity being non-swelled throughout the whole, it seems to appear perfectly so, nearly uniform, and is not perceptibly elevated by a horizontal position like an edentulous limb. When pressed by the finger in different parts, it is perceived to be elastic, little, if any, impression remaining, and that only for a short time. The swelling of the limb varies both in degree and in the space of time requisite for its full formation. In most instances, it arrives at double the natural size, and in some cases, at a greater size than double. In women, and in patients whose legs have been very much affected with anaemia, during pregnancy, the swelling takes place more rapidly than in those who
her differently circumstanced, the time-
time, in the former class of labourers,
arrival at its greatest extent in twenty-
four hours, or less, from the first attack.

This distress, happening
at the fullest time after delivery, as
it has come on at any period, from
the fifth or sixth day to the third or-
fourth week; but, most commonly,
I think, between the fifth and twelfth
day. My friend, Coat. A.R. Joams,
of this city, informed me to see a
case which made its appearance
in the evening of the fifth day after
the birth of the child. Her patient
appeared to labour under considerable
apprehensions; the pulse was extremely
quick, but feeble; the heat of the body
much increased, tongue white and
clammy, and the countenance pale
and expectorated; the urine, which she
urined in small quantities, was thick,
and of a muddy colour, which appro
Once diminished at the disease abated, the patience was inclined to believe, the face being of a pale colour and clayey consternation, and the humour discharge possessed an unusually offensive smell, and unnatural appearance. The patient was affected with the fever but about five days, when all symptoms of phlegmataceous boils disappeared. Either or both the legs may be affected together or successively. When the case is the case, the disease having remained for a certain time in one leg, and the symptoms being abated, the other has been suddenly and unexpectedly urged. When the symptoms have occurred most equal violence, and gone through a similar course. But the patent, having escaped the danger before apprehended, though disconcerted, fears the second attack, even if it b
More severe better than the aid the 
foot. Should the second leg become 
affecting, it cannot be supposed to 
be a metastasis of disease, the leg first 
affecting remaining in the same state, 
and obtaining the same "progress as 
before the affection of the second. 
When only one leg is diseased, there 
are in some cases, occasional случая-
lations, often apparently consider-
able amendment; and these may 
render it necessary to change the 
order of treatment, or even to return 
to that which was "proper at the 
commencement.

After eight or ten days con-
tinuance, according to its ability or 
possibility, the more urgent symptoms 
of this disease begin to abate, but 
in many cases very slowly; the debility 
and oppression sometimes remaining 
for several weeks, or even months, as 
the constitution is naturally mor-
Wart or purpurous. Though all the other symptoms be paroxysms, the swelling may, and generally does remain for some time; and, in some very bad cases, the limb has never been reduced to its primitive size, or recovered its former term of agility and firmness, during the patient's life.

The constitution seems very much disturbed and enfeebled at the beginning of the disease, and unequal to the due performance of its common functions; yet after a certain time it seems to become fierce; for the patient appears partially to recover his strength, and after menstruation regularly; but even this change has seldom afforded the expected relief to the affected limb.

Respecting the pathology of this disease, it is extremely difficult to explain the cause of the alteration of
The text on this page is not legible due to the quality of the image. It appears to be handwritten in a cursive style, but the content is not clear enough to transcribe accurately.
Platy or change of organization. The
White attempts to explain it by sup-
posing that an absorbent vessel goes
upwards, overflows, and enters into the
Great % passing
upwards, overflows, and enters into the
Great $ of the cellular membrane, and
there coagulating, gives the unequal
fire observed in this disease. This
is by Mr. Mams a satisfactory of
planation, and we are still ignorant
of the nature of the disease. So
opportunity appears as yet to have
occurred of examining the leg of a
patient labouring under the influ-
ence of this singular complaint.
The disease has been at
tributed by Mr. Fry to an obstruc-
tion of the lymphatics; but he
apprehends the disease to originate
in the inflammation of the trunk or
trunks of the vessels, which inflamma-
tion may be excited by 'pressure or the
abstraction of some acrimonious matter.
Dr. Jenner entertains sentiments pretty similar to those of Mr. Hufn; for
he believes the disease to arise first
in the inguinal glands, by the absorp-
tion of an irritating principle in
the discharge, the consequence of an
unhealthy situation from the uterus.

These theories are rejected by Dr. Bulle,
as being inadequate to explain the
various phenomena of the disease,
and he offers the following, which he
conceived to be more consonant to its
real nature. As "Pre-disposing and
exciting causes to its the unhealthy
fact, the increased irritability and
disposition to inflammation which
prevail during pregnancy, and in
a still higher degree for some time
after parturition." Daily the con-
disturbed or relaxed state of the
motherness of the inferior part of
the

part of the time.
the trunk, and of the lower extremities, girdle. Contusions; or, violent actions of the muscles about the pelvis and thigh.

Pleurisy, occasioned by a suspension or diminution of the loces, or of the secretion of milk. 7th.

Food taken too freely; and, 7th. Stand ing or walking too much or too early.
The "proximate cause." The pleurisy, contains in an inflammatory affection, producing leading a considerable effusion of serum and coagulable lymph from the pleura into the cellular membrane of the lung; and he thinks that there exists a close connection between "pleurisy" and "pleurisy fever," "pleurisy fever," "pleurisy," and "pleurisy" sometimes occurring.

Doctor Thomas is of opinion that little or no inflammatory ten- stency is present in the system in this complaint. "The doctor," says he, "appears to be of a local nature.

And
concerned to the symptoms of the
affected. The doctor thinks that the slight tem-
porary derangement which takes place in the lymph appears to be induced wholly by the local affection, pain,
and distention.

Doctor Cimman supposes from the nature of the disease, that the inguinal and neighboring glands seem to be the parts first affected, and the subsequent swelling of the limb to be evidently occasioned by the blocking up of the passage for the lymph through these glands. He considers the pains and extreme Swelling of the limb, which are al-
ways somewhat alleviated when the swelling comes on, to be incidental, so that the swelling seems to show that those, which were before present, tend to be relieved, either by the
function of some, allowing the effu-
According to Burns the disease is not an inflammatory one, but from the directions of Dr. Davis, I presume Mr. Burns has merely taken a 'partiae form' of it.

Our distinguished countryman, Doct. Ellick, of New York, considers it as a general inflammatory affection of the whole brain, affecting all its various structures. He considers that it is not confined to the lymphatics; nor does he suppose it to be produced by pressure of the child in delivery.

The case to which I allude in the preceding paper, which was under the care of Doct. McManus, of this city, appeared, in every respect, to be of an inflammatory kind. Although, it was two days after the disease made its appearance before I saw the patient.
Still there was an evident motion in the "gulle," with other symptoms strongly indicating the existence of inflammation. It would be well, then, to remark, that the doctor had "previously bid her to the amount of fifteen ounces, and had ordered her bowels to be kept fairly opened by various salts, till an inflammatory disposition had prevailed. After two days more, which was about the first after the first symptoms appeared, the oval again bled to the amount of about thirteen ounces. The bowels, being free in their action, the salt was superseded, at night, by the following specific:

Min. Hyd. Mitis. p. x1/2
Pulvis Arsenivd. F. 3
Pulv. Specie. p. x1/2
Litras Pittasi F. 3
The patient commenced with the
fever at nine o'clock at night,
one of which she took every three
hours during the nights until the
whole were used.

I accompanied the Doctor
next day to see her. Her pulse,
which was the day preceding rather
tense and nearly 136 in the minute,
was now reduced to 90. Her tongue
appeared moist and not so dry.
Her skin perfectly cool,
and moist, swelling much dimin-
ished, and, to every appearance,
considerably improved generally.
After a few days, say two or three,
the Dr. was perfectly free of
disorder, save alone a slight
These affection of the extremity, which
the Doctor imputed to a debility of
the absorbents, and for which he
ordered a liniment composed of
equal parts of Aqua Ammoniac.
Spirits of Camphor, Album, Chia, and Tinick. Opii, together with the internal use of Calomel in small quantities, Spirits, Sulphur of Antimony, and Salts of Poult. For my own part, I cannot offer much respecting its pathology, as I have not had an opportunity of seeing but the case I have related, from which I could infer it was evidently an inflammatory affection; and, as such, should be treated on the Antiphlogistic plan.
An Inaugural Dissertation
on Cynanche glabra
Respectfully Submitted to The
Inspection of The
Provost, Faculty & Trustees
of The
University of Md.
By Samuel Slope,
B.A., Maryland—1838
We contrasted forces

in Question

with

our

The

Professor of

Physics

and

Mathematics

D.

We

considered

it
To Dr. John Harper

This Inaugural Dissertation is respectfully inscribed as a tribute of gratitude and friendship.

By

April 3rd 1830

19 Mr

University of Wits
"Cynanche Saligna"

The term Cynanche is derived from two Greek words which import the strangling or suffocating a dog. So called from dogs being said to be subject to it. It is a genus of decocu which Collins classed among the Pyrevid order Phlegmatic.

He says this name is applied to every internal inflammation of the fauces, but these inflammations are different according to the part of the fauces which may be affected, and according to the nature of the inflammation. In his zoology, after giving the character of Cynanche as a genus he has distinguished seven different species, the second of which I shall take up viz Cynanche.
eligna. The Malignant, Putrid, or Ulcerous, non-throat which is so easily distill
acquired from the inflammatory dynamic at least that which is produced by a great
degree of action, as Dr. Rush said, mortification was always brought on by internal
action, in consequence of which blood
readied the cancer, but was generally
unsuccessful, it is produced most fre-
guently by a peculiar state of the air.
period, hence it is frequently epidemic,
 seldom sporadic. More contagious,
some authors have endeavored to
prove Dr. Cullen regards the eruption
of scarlet fever as a pathognomonic
symptom of this disease, but that
endeavored to show that this is corre-
ently distinct it as a consequence
requiring different treatment. Dynamic
Maligna. May and does attack persons of all ages, but more commonly the young. Those of weak and infirm constitutions, the disease is preceded by a chill succeeded by shiverings, with nausea, sickness, anxiety, burning about the same time to stiffness is felt in the neck, with hoarseness of the voice, and sneezing in the later stages. Which when first appear of a deep red color, with some tumescent but those are seldom Considerable, and deglutition, is seldom difficult or painful. On touch a number of white or as a round spots appear upon the inflamed parts. These spots spread and unite, covering almost the whole face with thick blisters which falling off disclose ulcerations, while these...
Symptoms proceed in the fevers, they are generally attended with a Cough, which pours out a thick, solid and solidified matter, evacuating the nostrils and lips. There is often especially in Infants, a frequent purging, and a thin acid matter, flows from the anus, evacuating the abdomen and the neighbouring parts. With these symptoms, the Dysentery proceeds with a small, frequent, irregular pulse, and there occurs a manifest crisis—bation every evening. And some Remits—lapse in the morning, a great debility appears in the animal functions; the tendons is affected with delirium, frequently with coma. On the second day, frequently later, Eruption occurs, Append upon the skin, which at times in small points hardly apparent...
but for the most part in patches of a red colour, spreading and uniting to cover the whole of the skin. They appear first about the face and neck, and in the course of some days spread to the lower extremities. The scarlet redness is often considerable on the hands and extremities of the fingers. Which feel stiff and swollen. The eruption is irregular in the time of its appearance and duration. It usually continues four days and goes off by some degenerations of the cuticle; but we have on its first appearance, nor on its degeneration, never always produced a resolution of the fever, or of the other symptoms. Dr. Cullen also regards the scarlet eruption as a pathognomonic symptom of Osmance. Maligned, he says.
the latter is not essential to, or in other
words does not always accompany Cowp
fever. And on the other hand, Dr. Carels
Eruption is not essential to, nor does it
Always accompany Cynanche, though he
Contends that it does almost always,
but that the diseases are essentially
different. Dr. Caldwell says that Not
withstanding all Dr. Cullem's reason-
ing, he is strongly inclined to believe
that Earlating, Anginac, Cynanche,
Maligna, are but different forms or
Degrees of the same disease. And that
they stand related to each other, being
in the same ratio as distinct and
Confluent Small Pox. But how does
Dr. Caldwell reconcile the contradiction
which Stockly makes on the next
page, Where he says in most Cases of
Earlating, bleeding constitutes
An important remedy. And may be repeated several times with the greatest advantage, yet he calls them both the same. While his treatment & knowledge is then different for while he bloods and uses the antiphlogistic regimen in pul. For red stimulants & tonics in the other. That they are essentially different. Or think not physicians can for a moment hesitate. I doubt we will now give the diagnosis by which we characterize each. One from the other. Cynanche Maligna had been called putrid loath some the pages of the older writers, while we do not find he word said about caratina. The one is inflammatory the other. Not Cynanche Maligna is described as being a decade attended by a long
...
Typhus state of fever with an affection of the throat. Scarletina is an inflammatory disease, with an eruption on the skin, which differs in Colour by being like a Sunb Burdock. There is also an affection of the throat but the floors are white, I do not manifest that malignant appearance of the other. Cynanche affects the debilitated person, and also those who have had scarlatina. "Minds at War tend for a Contagious disease to aff of the same person twice." Therefore we say one is contagious, the other is not the like. Nor that scarlatina is contagious, by the well known fact of a person visiting a family wherein the disease is prevailing, he returns to his own sections of Country, had the
Diseases and Contaminants all those who may come within the sphere of his contagious disease. The people and appearance of each are also different. In scarlatina, it is of a scarlet color, sometimes of a red and red. In particular, the face is red and pulsated, In cynamona, the face is pale and cadaverous. There is no great prostration of strength. In cynamona, the face is red and pulsated. In scarlatina, and results from the proper destitute remedies. Nothing used in the first stage. This is the primary cause of which the remedy. If properly treated in the first stage, it should terminate fatally. While on the other hand, cynamona is malignant in most of the instances. Most terminate fatally. Also there is a
Scarlet fever entirely free from any affection of the throat, which sometimes prevails in the epidemics, therefore there must be a scarlet eruption produced by a specific contagion without any determination to the throat. Othm, the contagion may be supposed to be more especially determined to produce the eruption only. Also, in the commencement of the disease it is not attended with so much anxiety and mortification, which introduce the exanthematic diseases. And more certainly Cynanche Colliquia. Also, when the thoughts have formed they give little appearance of illness. Cynanche, it is also attended with less Corza than the latter. From these considerations though there may appear to be some affinity between the two.
A disease, it will, and must remain evident from what has been said, that the two cases are specifically different. I shall now give the treatment but from what has been said in union with the difference of treatment, we will say nothing more of scarlatina. More than need to observe prevails that in mod of

Cure particularly depends, upon a strict observance of the anti-philosophic regimen in the treatment of syphilis. The ability attending must be kept constant. Lyn in view, therefore, all evacuations by bleeding, purging, and improper except in as few instances, where the ability is left to the inflammatory symptoms, more considerable, caution is also advisable ways to be observed, the oozes are to be preserved from the effects of the acids.
they are therefore to be frequently toasted
with Gargles. While we support the
general tone of strength of the system
by Tonics and Stimulants, of which
Black Wine, Camphor, Mace and
Ammonia that are principally used,
When any Considerable Fever
etc. that is Applied Externally.
be of Service. And much prized in the
Estimation of some. Dr. Potter however
says the State of Debility is so great
That if we are not very careful the
Pain will become Gargenous and
forms the Obinate Ulcer, strongly
have used Emetics, or Masticating
pulvis, here. Can always be suspended
with [signature]
On

Inaugural Dissertation

On

Uterine Hemorrhage

for

the Degree of

Doctor of Medicine

Submitted

to the examination of the

Provost, Trustees, and Medical Professors

of the

University of Maryland

On the 4th day of April

1830

by

 Ebenezer N. Allen

of

Maryland
To G. C. M. Roberts M. D.

Dear Sir,

The great veneration in which I hold your talents and your private worth, would have been sufficient inducements for this dedication, but the polite and friendly attention which you have invariably shown me doubly demands my highest compliment. With the warmest wish for a permanent restoration of your health, and the reiterated success of your scientific labours, I am with esteem,

C. N. Allen.
Introduction to observations

on

Uterine Hemorrhage

A young man when about to commence his medical career has an
arduous task before him and ought
to be very circumspect as to the path
he intends to pursue. The eyes of the world
are upon him and when he makes his
appearance in the character of a man of sci-
nce he cannot be too cautious. If any
thing should drop from my pen that is not
congenial with the feelings of my able pre-
ceptors they will excuse the error and impute
it to inexperience.

When we cast our eyes around us and
see with pain the many and awful diseases with which men are affected and see the doleful crowds which face our sweets affected by some malady within the reach of medicine. And those persons are from some causing terror and left to the ravages of disease and death is expected in the mind of the benevolent and humane man feeling of sympathy and sorrow and he is ready to exclaim was it in my power I would relieve the sufferings on my fellow being and snatch him from the influence of disease and from the fear of death. I hope I may be excused when I say that I believe the greatest number
of these diseases are brought on us by our own imprudence. I believe that is now the received opinion that the habits of mankind give rise to at least one half of the disease with which our world is afflicted. Then it becomes the duty of every medical man as well as of the good part of the community to use their exertions to correct and improve the habits of our fellow beings.

To alleviate misery and enable man to enjoy and extensive portion of health and happiness has been the first and most anxious wish of the human
In making choice of a subject for this dissertation, many obstacles have been presented. The innumerable variety of disease which are interesting to the medical man have already called forth the talents of the most able men of the world and they have expostulated there using in laying down rules by which we are to be governed.

Others who have been candidates for medical degrees have raged their infirmity to make discoveries in the science; whose truths I cannot hope to improve. I shall therefore content myself with making a few general notes on Uterine Hemorrhage.
Uterine Hemorrhage may be considered a postpartum discharge of blood from the Uterus; from a special or partial separation of the placenta which in general may be looked on as its immediate cause.

But the remote causes are various and indeed whenever we think of the many dangers to which the pregnant female is exposed we are only astonished that they are not more frequent. Some persons every time they are become pregnant are threatened with immediate death, whilst others can go through the most arduous and toilsome duties with out the least inconvenience. We are at a loss to account...
For these things except on the ground of the habits of the two classes one from childhood to undergo fatigue and toil whilst the other is raised in the most delicate manners and when they become pregnant the systems has not sufficient energy to become the changes which have taken place.

The various opinions with respect to the attachment of the placenta to the uterus are so fully before the before the world that it is unnecessary for me to make any observations on the subject and shall speak of the causes and treatment alone.

Uterine Hemorrhage is more dangerous according to the length of time the female has been pregnant from the following reasons.
In early pregnancy the womb is not much
distended and the quantity of blood necessary
for the support of the embryo being very
small and the vessels which attach the
placenta to the uterus inconsiderable
in size if a hemorrhage come on this conse-
quentially discharged in so small gradual and
insensible quantities that the system has time to
replace the loss and by that means the embryo
is preserved and we are by a judicious
Treatment enabled to save both mother and child.

But when the female is very far advanced
the vessels have become important
and are carrying large quantities of
blood if at this time from some cause the con-
nection of the placenta are broken up the hemorrhage
is propose and the patient may suddenly fall
a victim to it. In such cases there is not a
decency of blood to keep the heart in motion
and the patient soon faints and from that
will seldom if ever recover. These cases
require the most prompt and energetic exertions
on the part of the practitioner such as the
immediate uplifting of the membranes and
and letting off the water. In order to bring
on labour as soon as possible introducing the
hand and then hold up and bringing down the feet of the child
at the same time using as astringent injections and
cold applications. The morbid age from bruises
on falls may be considered the most dangerous
for they are of such a character that they not
only produce the most alarming discharge but
also other serious effects as complications.

In the last stages of pregnancy they are not
constant but will cease for a time and
then come on with redoubled violence
and unless and we had immediately
they may in a few minutes prove fatal.

In those cases the hemorrhage
may be rather secret or visible. In the
the secret we have some trouble to
discover. The source of the mischief and
before we are a wave syncope may be
induced but when we find the patient con-
taining of great weakness and there is an
enlargement of the abdomen a pale yellow-
counterpanuce with a weak tremulous pulse and
the symptoms of apoplectic syncope we may suspect an
involuntary hemorrhage and we are to proceed accordingly. There have been various methods of treat-
ment in such cases, but I shall content myself
with detailing those I think the best.

When the hemorrhage is in the last month of pregnancy, I think the most judicious plan
would be to bring on labour as heretofore pointed out
such as delivering by the feet, using injections and cold
applications. If the patient is plethoric use the
lanceet, if she is in a state of debility use a nu-
tritious diet with some astringent given internally.

Hemorrhage may be produced by the placenta being
placenta being attached in part or whole to the uterine wall, and
in this case we call it a hemorrhage from nequi-
ty. When this is the case, the patient may pass thro-
ugh her first months of gestation with out much
inconvenience; but when the uterine by the growth of the placenta becomes distended and the cervix thus lost in a considerable degree, there must be hemorrhage, for then the conscious of the placenta in part or in whole are interfered with. That is as much danger from the edge of the placenta being attached to the os uteri as if it was directly over it, to this opinion I cannot subscribe; for it appears to me that when the placenta is merely attached by its edge that there will not be so great a number of vessels lacerated and consequently there cannot be so great a hemorrhage.

There is some dispute as to the method to be pursued, but I am of the opinion that when the hemorrhage is considerable
we ought to introduce the hand by the side or through the placenta and rupture the mem-
branes and permit the waters to pass off; taking
hold of the feet and bringing them down.

But if when we have taken hold brought
the feet, the womb does not contract on the
child, we should we should wait, as there
is but little chance of hemorrhage at this
period, on account of the prepuse of the child
on the broken vessels. On the contrary, if
we were to bring the child away and the
womb did not contract we might have a
greater degree of hemorrhage than before
and lose our Patient in the end. Should
hemorrhage come on and continue after
birth we should act as in other cases;
that is, we should use all the means to
excite the womb to contract, by gently rub-
bing and pressing on the abdomen, or by in-
ritating the uterus, or by giving some astrin-
gent, or stimulating injections; as alum, tea
wine, quercus, roboris, or kind; at the same
time employing cold applications.

Hemorrhage may proceed after de-
livery, from a want of power in the womb
on account
to contract; of debility in the general
system, which may be produced in various
ways, either from disease during the
period of gestation, or from tedious labour
of from the patient having lain too
much on one side, and the powers
of the mother may have thus become
so enfeebled that the blood is poured out, (and if not soon relieved may terminate in death!) In case of this kind of think the most judicious plan to be pursued is, to excite the uterus by introducing the hand and moving it in different directions in utero by giving some cordial, and nutritiousaret, at the same time using astringent injections, as Wine, alum &c. and cold applications as ice water, lead water, Vinegar & water, also enjoying perfect rest.

With these remarks I shall conclude by submitting this with respect to the Faculty.
is Coehe and will Cohe and see them. My Cousin
visits me Coehe and I Coehe not as Coehe to Cohe to
and as Coehe and as Coehe to Coehe and as Coehe
Coehe to Coehe and as Coehe to Coehe and as Coehe.
A Dissertation on the Pathology of Inflammation.

Felis que Polutum renascerem causas, submitted to the Professor of the University of Maryland.

by

Thomas Smyth Wilson

A. D. 1830.
With feelings of deep respect, we avail ourselves of this present opportunity, to pay a debt of gratitude, by dedicating this, our first essay on a medical subject to, a kind and affectionate Parent——under his guidance, we have not only been from our earliest infancy, but under his immediate direction, commenced and prosecuted the study of Medicine. To him we are indebted for much practical information, and for the many difficulties he has enabled us to surmount——
Of the Pathology of inflammation

Cause let us est meteema.

Reflecting on the various subjects of medical science destined to our present purpose, none has occurred more fit than an inquiry into the Pathology of Inflammation.

It is not our intention to set forth any new principles on the subject; and before all, we shall content ourselves with stating the facts as they have been presented to us by others and those documents which appear to be best calculated to support the opinion we have been induced to adopt.

What we have found in the course of this inquiry derives from one of the Professors now holding a chair at the University of Maryland, to whom we are indebted for the doctrine, habits to流传 in that school with so much eloquence and learning, by the late lamented Professor Sturridge.

As a Physician and a Professor he stood preeminent; all were known and respected his talents; and no one heard him but to advance his depth of understandings.

These are to adopt implicitly the opinions of others and not as becomes only philosophical and experimental endeavors to sift out for ourselves and abide at the truth or falsity of the various opinions that daily present.
themselves either by care or through the blushings of great men, we should be ever lost in the darkness of error. Duplexed and confused, we seek in vain for the clue, and instead of collecting practical and useful knowledge from our studies and advancing towards the summit of medical attain-
ment, we ought to consider it as one of those, when
the Putean Poet calls, "Vindicat ventum."

Let us not forget to consider the obvious bances down to us by Galen, Hoffman, Etienne, Stahl, Boerhaave and others among the ancient writers, but to carry on to those parallel in the schools of the present day. But let us first premise, that there are two powers in the animal system tending to preserve life. The one the Power of Conduction, which preserves over the vital actions of assimila-
tion, circulation, and respiration. The other the
Power of Restoration by which local injuries are repaired, and the effects of disease obviated—such as the union of a fractured bone, granulation, creation, and the healing of an incised wound. What has
been termed in bulk, by known by the first intention. We cannot agree with Mr. Hunter that this union
by the first intention is within a disease action, or
(as he has been pleased to term it) a healthy inflammation. This operation of nature (for thus it must be considered) will generally take place, when the surface of a
merely incised wound is really applied and kept in con-
last a sufficient length of time, to allow the adhesive
matter to be forced out into the new bulbs to shoot into.

But I constantly find that when the power of life
naturally resident in the parts affected have been drawn
by violence, where there is foreign matter present, or
where the temperature has not been properly regulated;
that cure by the first action is mere accidental, but a second
proof of inflammation itself will ensue.

In his depth diversion of his concise

chapter on inflammation, we find Mr. Hunter, speaking
in the following manner:

"I have given the most simple idea I can form from
any one to a part, with the nature, immediate, and
consequent means of restoration. I have also treated of
cases where they become a little more complicated,
requiring the aid of art as a substitute for the simplicity
of the part. The action of the part is not necessary in either
of these except that of the blood, forming its own help, and the
blood itself, and being known of the nature of the part
in which it is extravasated. But I must notice that the
violence done was often so great, or that inflammation
must take place so much, as in death the cases to exclude
infusion; we have therefore an action in such cases tak
place in the parts, called inflammation. That
this action affects in the restitution by producing, an
extravasation of the coagulating lymph, which became the
second kind of union. I shall also state what may be
called the natural tendency to inflammation, to
serve as a kind of leading principle. We shall
find that inflammation may arise from very different
causes, and often without any apparent cause, and
that its operations are far more extensive than being
by the act of producing union in parts previously
violated, for it more commonly produces union in whole
parts, or in natural separations, such as the comminu-
cellular membranes, large circumscribed cavities.
Joints are, because such surfaces are not naturally dispose
stowards, but only in consequence of some unknown
action being produced. And although these affections
are unnatural, yet that tendency of the parts to
admit of this union becomes a species of cure.—
It is in consequence of this part to Rupston, in some
degree, the same mode of action, which divided parts
do, when brought in contact, that in such cases sup-
fusionation is produced. As inflammation often ar-
ises from disease, its salutary properties are in many
instances not to be evident, although they may finally
take effect, as it were, to Rupston. In disease, or
becomes the ultimate in disease, where it did not begin
it as in the devour, cancer, etc., and some mortal human
on that account too, its salutary properties are sometimes
not so obvious. However, upon the whole, as inflammation
is an action produced for the restoration of the most simple
union in some parts, which oversteps the powers of
union by the first intention, we must look upon it as such.
Inflammation is to be considered only as a distinct state of parts which requires a new but salutary mode of action to restore them to that state wherein a natural mode of action alone is expected from such a view of the subject. Therefore, inflammation in itself is not to be considered as a disease, but as a salutary operation consequent to some disturbance or some disease. — to cite for Dr. Hunter. If there is any one who will say that he can clearly comprehend the above quoted paragraph, and reconcile its contradictions we must fully acknowledge that his understanding is far more acute than our own. He does not pretend to any high rank of intellect, but he certainly do pretend to some shade of common sense. That inflammation which "more commonly produced within the whole parts or in natural subjects" should still be considered as "but a salutary mode of action" appears to be a strange perversion of the doctrines of healthy action. But the reason alleged is the more strange — "Because such an agrees with naturally things to unite, but only in consequence of some whole common action being produced." Hence may be considered a healthy operation with as much reason as inflammation is to consider. And yet with any one say that — because fever does not always in deaths, it is not a disease.
of the numerous deaths which fill up the tables of mortality, how many are there, in which inflammation is not considered? We are inclined to the opinion, that all fevers are more or less connected with inflammation. In the same page he says "that inflammation in itself is not to be considered as a disease and adds a little further on that "even in all cases or of all kinds, is a distinct action like inflammation itself." Now, what are we to understand by all this? Does Mr. Hunter mean to convey the idea that fever and inflammation are opposed, tending to living organization? Can we do less forget the obstinacy of reason, if ignorance and common sense lead us to believe for a moment that those "unnatural adhesions" which we do constantly witness in the discharge of "operation," are "salutary operations," if inflammation is but a "salutary operation," why do we intend to arrest its progress, if we do not act in concert with it (on those principles) and thus accomplish the end we have constantly in view viz. the health of the patient?

Therefore we conclude, that inflammation in all its shapes and forms, from the deepest scarlet to the whitest "chill," can be reasonably considered as another stage of disease. It should be acted upon, if part of the panacea which treats of the "blood forming its secret,"
Inflammation is characterized by increased heat, tingling sensation, and a throbbing sensation in the parts falling into disease.

Mr. Hunter had the following expression: "The act of
inflammation would appear to be an incussation of the keloid, but whatever action it is, it takes place most probably in the smallest infusco of the least inelastic, but the smallest objects, exist. The larger objects may be considered as only the conveyers of the materials for the smallest to act upon and dispose of according to the different situations; however, inflammation in a part is not only an action of the smallest objects in the part itself, but in the larger objects leading to it."

Mr. Hunter involved it a direct contraction.

But let us see how far his position are correct.

This increased action of the larger objects must be either an increased frequency or force of contraction.

Admitting for the sake of argument that one part of the arterial system is capable of more frequent contraction than another, what will be the consequence?

Why it appears sufficiently strong that as the action takes place in the "smallest objects" only of the vast influence, and the "larger objects leading to them merely conveyers, that the entire action of the phenomena of inflammation would exist."
For as the small rebels, by their greater frequency of action, put themselves in a higher state of irritation than they could be subserviced to; by the larger and more passive cortex, instead of leading without restraint into the part you are to be taken as unadmitting. But let us go further, and admit that the larger rebels also have a greater frequency of action. Will this account for the phenomenon? Do we not find the action of the rebels more frequent after violent exercise, during the first stage of the fit of excitement, or at a moment of great mental excitement? And is this inflammation!

No one it is true, who is not to the least knowledge of the character of inflammation will be found to have the reputation of a physician to far as to a fit that they are essentially the same. Yet we may have inflammation superimposed upon either of the above mentioned cases, for instance! When the body has suffered such a degree of irritation as to bring about an acute delirium, they will no longer able to endure in that state of delirium, their accustomed stimuli and inflammation must be the consequent. Thus we find that we are left completely in the locative by increased frequency, that is not the

how far in the case of contraction will be a useful if the arteries contract with more rigor than usual, their diameters must certainly be lessened, and consequently less blood would be capable of
For they, through them than when in their ordinary state. Whether we refer the increased pulsation, to a more vigorous contraction. For the pulsation itself is nothing more than the dilatation of the arteries, which is always greater or less according to its capacity to resist the impelling force of the blood. as we have previously endeavored to explain that inflammation may arise from friction or the application of stimulating substances to a part, we can readily accept but cannot agree with the doctrine that it is in consequence of "an ejection of the action of the impels" instead of what ever kind. If produced a reduction of the powers of life in the part and a consequent debility and weakening of the cost of the arteries, thus rendering them incapable of sustaining the impelling force of the calculation.

Doyen in his work on surgery advocates the equal doctrine, that "inflation draws the blood from all points of the circumference to the centre of the orifices of the part." What can we to understand by this? Lay in another the applicability of the remark, that the blood gets to this centre by arteries in certain vessels, whether it reaches the center of inflammation, by what power does "inflation draw the blood from all points of the circumference?" Great men appear to be privileged today what they please. But it should be always borne in mind that what a short duration moment.
Blood gets into the system by a dorsal vessel. The
the medium of vasoconstriction and it is through
medium that the heart also acts on it.
It has been pretty generally a known principle that the collection of blood is continued from the
edges of the heart to the remotest point of the system.

Then by what means does the increased quantity of blood
arise at this unites part? It must either get there
by the enlargement of the arteries, or the addition of new
vessels. One will say, or sure so, that the mere dilata-
tion of an extremity, would endanger the great arteries,
or give rise to the formation of new vessels.

Our author finding himself involved in a dilemma
must need let his ingenuity to work in order to extri-
cate himself, and after a mighty effort, he arrives at
the resolution. He tells very gravely that, "the blood gets
there, even contrary to its usual course by retro-
gradation in certain vessels" and as it had been ac-
mitted that the blood is continuous throughout the
natural system, and that the column is produced by
the forces of the heart and arteries, cannot be
disputed for a moment that the minute capillary
vessels are capable of driving back this column,
in an antipodal direction contrary to the impelling
forces of the heart and larger arteries.

The vessels of a part may be weakened and dilated. The
blood may accumulate here, more and more slowly ascending
as the vital forces of the minute vessels are reduced, but
thus opined can be retrograde action. The operator acts that
takes place in disease is under the influence of the heart.
Do moderation draw the blood? Then, by the action of the smaller vessels, pumping it up as it were? The fast states that "the album of blood produces the augmentation of the action of the arteries." Shortly after, we find time according to the ancient remedies in modern times. The Cap in fact, the heat, the drying, the inflammatory, tendinous disturbances, an augmentation of the vital bodies, and the specific action of the capillaries. He flatters himself, that it has been shown, that inflammation does not consist in either an increased force or frequency of action in the capillaries, but it appears to us that if and from purpose, total of an augmentation of the vital powers.

The perfection of the vital power depends upon the regular and easy performance of all the functions subservient to the animal economy. There exists between all parts natural relations, corresponding with each other, and carrying on a reciprocal interchange of action. The beautiful harmony "saeculi est harmonia," produced by the concurrence of all the actions toward health. The proportion as this harmony is maintained or interrupted to note the functions of the parts be distinct. By whatsoever means the functions are impeded, the vital power must be first acted on and improved. For so long as the vital power are capable of sustaining any degree of violence, then it is, so long will the animal economy remain suchfundv and iner.
We can account for some of the phenomena of inflammation, without admitting a diminution of the vital powers, and consequent debility and disease. When we reflect that the fulness of vital power is health, how are we to believe that there can be an augmentation of the vital power? If Boer be correct, inflammation must be subserved as a higher gradation of health. But why argue a point that is self-evident, and needs no demonstration? Thence would it be, that the increase of vital power

Let us now tabulate the diagnostic signs of inflammation—And first of all, authors agree that the red colour of the inflamed part, is describable to the quantity of blood it may contain, and differ only in accounting for the reasons by which this accretion of blood may be effected. This increase of red, "say the Hutlers", appears to arise from two causes; the first is a dilatation of the vessels, where by a greater quantity of blood is allowed to diffuse those "veils which only admits dyes in a state of health". Before there can be a greater quantity of blood in a part than under ordinary circumstances, there must be an increase in the capacity of the vessels. For unless these can dilate it is not possible it can contain an increased quantity of blood.
Inflammation, therefore, is in proportion to the capacities of the vessels to contain an increased quantity of blood. If inflammation be an increase in the capacities of the vessels, by what means are they enlarged? There are but two means in which a vessel can be enlarged: the one a healthy and natural action; the other a disease, and morbid process. In inflammation the vital powers are suspended in the ratio of its decrease. The enlargement of the vessels cannot therefore be attributed to any operation of nature. Much time is also required for its increase by a natural process. In treating of this part of the subject, Mr. Hunter writes with equal memoir and intelligence, as we are almost wandering in all the mazes of nature.

Speaking of the dilatation of the arteries, he says—

"When we consider the whole of this as a necessary operation of nature, we must suppose it something more than simply a common dilatation; we must suppose it an action in the parts to produce an increase of size to answer particular purposes; and this I shall call the action of dilatation, as we see the arteries increase in size in the time of the tertian gestation, as well as the arteries in the time of labour. We may therefore say that this is nothing but "a beautiful simulation of a common relaxation." We must assign an object to the operation that has a "mysterious, spiritual grip on nature."
(What idea does Mr Hunter intend to convey to one by what he calls "the action of pulsation"? The idea we entertain of pulsation is the capacity for being enlarged when impressed upon by some active agent. That an elastic tube can dilate itself, without being acted upon, is a thing impossible. The muscular coats can have no effect to check this action of pulsation, for they consist to diminish as other than increase the size of the vessel. This Mr Hunter appears to have been aware of, when he tells us, "that instead of an increased con- traction, there was rather what looks apparent increased relaxation of their expansible powers being left to their elasticity, entire;" and again, "the fibres of muscular contraction must be seen to give way in the inflammation, for they certainly dilate more in inflammations than the extent of the elastic power would allow." How this "increased relaxation" can be reconciled with his previous notion of an increased action, we leave for others to determine. An action in a part "to answer particular pur- poses" must be under the direction of the animal economy, and consequently, a healthy action. It is above all to say that nature has provided an action for other purposes than those necessary for the preservation of health and rectitude. The increase of the arteries of the limbs and the interior itself, during the period of gestation,
is an operation of nature carried on for wise and natural purposes. Now this operation is
perhaps an inferior nature must cease to exist.
How can there be one found bold enough to assert
that inflammation is necessary to existence?
How then can Mr. Hunter give them to us as para-
left cases? The evolution of the "os truces in the time
of labour," is also a natural process carried on
under the direction of the laws governing the parts.
W. S. Cooper in his work on delivery says, "There must
be something besides merely an increased action of the
veins. There must be something besides an enlarge-
ment of the ducts, to constitute inflammation.
Both of these changes happen to the external ca-
struction in the prostate of the male's bones, to the spon-
gy state of the arteries of animals, which expel the blood at
certain seasons of the year, and to the arteries of
the uterus in the third month of pregnancy. Still in the
instances more mentioned, there is no pain or
inflammation, no symptoms, at least.
After this it appears that these natural processes
differ entirely from inflammation. We find
him saying on the very first page, "Such an aug-
mented flow of blood to a limited point of the cir-
cular machine cannot be produced by the action
of the heart, but must arise, inappreciably, from
a power produced by the veins. Hence the
flush of Tozer, which seections are increased diminu-
tion of blood to the cheeks when a person blushes, and
which, affects the corpora carnaeosa and increases the
nerve excitement. Resting once more in the
Corpus car. as revealed by our rods, we see that the
colors in the posterior chamber become tints and
colored by the sense of power which occasion the
increase in the direction of blood to the eyes,
when a person blushes, and which injects the coro-
na carnaeosa under a nervous excitement. For
these are healthy actions performed by natural
laws and inflammations as we shall states and
are never take place so long as the vital actions
of the heart remain unimpaired. And still those
 lords inflammation and pain most symptomatic.
To what then are we to ascribe this “inflammatory flux” the
say it cannot be produced by the action of the
heart and that there must be something besides
an increased action of the nerves. We have heard
a great deal lately of the capillary nerves acting as
direction ports and causing the blood towards
the posterior part. In reply to this we may simply
ask—If any one has ever seen these little Hydras
breathe against, their laboratories test?
And by what invisible hand they were worked?
He must have good eyes to see.
Who sees that must be seen.
We may say that the animal economy in general
is entirely subject to the mechanical laws that govern
motions, but in this the immediate control of the own
peculiar vital principle.
Now since the current ascends, the vessels receive a greater capacity of the inflamed vessels to 'an action than the part to describe particular purposes.' May we not consider it, a heightened state of the vessels produced by some foreign agency or accident in the part as to reduce its vital force. So soon as the vital actions of a part are impeded by an opposite cause, the tone of the arterial tide is lowered and rendered less capable of resisting the influence of the heart. Consequently the diameter of the vessels will be increased, and their recovery under the influence of the parts will be left incomplete, and thus there will be a greater accumulation of blood in the part. It cannot be denied that the vessels are enlarged in their capacities, and that this increase be noticed is also necessary another wise, inflammation is not disease, but health. Inflammation must always originate in the colored left arteries and before these can be injected with blood the tone of their coats must be changed. We have in addition to Dr. Hunter the testimony of many respectable writers, that the vessels are enlarged under inflammation. Doctor Whedon and Airs, was inflammation quam in stasis dans rebutisse epi. He also admits it is probable, that the vessels are in a great degree to the colorless arteries denitured with red blood. "Valde potro profiteabile menthe, Magna saltem opparte, delebas Barbara auspiciantis, dolium jam tranquillum." Here may be found this talent.
and learned advocates for the doctrine of increased action, compelled to admit, that the redness rising in a great degree to the direction of the colourless vessels. And himself, explaining in what manner they are made capable of retaining this fluid, so different from what they are accustomed to carry—"Dobiliary etc." The simple admission that the vessels are weakened or inflammation for the accumulation of red blood and the consequent phenomenon of redness. Our conclusion is also warranted from the effects of an operation. The female vessels of a tract shortly after having been forced from the irritation of the parts in art operation are so much enlarged in their main stems as to admit a free current of arterial blood to flow with its characteristic jet, frequently compelling the impromptu surgeon to continue the suction and search for the cause of this teary and dangerous circumstance. In this case we conclude the nurse a medium as foreign agent, to lower the tone of the arterial taphe, also by thus lessening its capacity to resist an impelling force, the blood vessels are compelled to receive a greater quantity of blood than usual. The failure of the exhalant sponging out into the surrounding tissues, a greater quantity and a fluid of a perspirable nature than when in a state of healthy action, might also be looked on as a proof of the condition of the vessels—
The second cause of edema (according to Mr. Hunter) is owing, probably, to vessels being tied up in the stratified circulating lymph.

No arrangement has the characteristic name of more delicate texture than the "true engorged artery," or than it that arises from a blister. The blood Hunter tells us that in these cavities themselves up in the space of a few hours, carry on a circulation of themselves, and after a short time by that intuitive power he has left us to judge, themselves to the stumps of and thus become incorporated with the general circulatory system? Whether has he lived long enough to tell us how this blood came to be manufactured out of the circulating glands? Should not have been formed by the vessels for he has told us that the blood flows the vessels. We are aware that there has been an attempt to illustrate this objection by adding, as an example, the formation of blood in the skin during the process of circulation.

This we must deny absolutely. We deny to have the least bearing on the present question, the one being those (natural laws of which we have already said) must be altered; the other (accident, &c.) it must be, a consequence of disease. But it is the expression of its own absurdity. To conceive it possible that any thing could point itself in opposition to the lowest degree of tone from the surface.
Doctor Boston has proved that what Mr. Hunter calls evaporation, though it is, as he says, the fibres of the blood, and above all from Sir James Cockey how this fibrous substance originates by the expansion of the blood corpuscles.

The expansion of the inflamed part may be attributed to two causes. The enlargement of the vessels and the effusion of blood. It is always greatest at the centre of the inflammation, and becomes gradually less as it is further removed from that point. If the vessels are enlarged but in their columns and contain a greater quantity of blood than under similar circumstances, it is evident that this increased blood will occupy a much greater space, and therefore the swelling is proportionate in a great measure to this vascular augmentation. Again, as the vessels containing old blood are wrenched and enlarged, must add a little more of the capillaries be dilated, permitting a greater quantity and a more free flow to escape. But if the swelling were attributed to the entire effusion, we should not expect to find the shock from to rescue. For the integrity of the vessels must always be disturbed before there can ever be an effusion of red blood.
The term inflammation takes its origin from the
Latin word inflammare which proves that the idea of heat has been always connected with it.
Although Mr. Hunter's experiments tend to prove that there is not an increase of temperature yet
from the action of Taracke and others the man
venture to concluded that there is an elevation of
dermal degrees in external parts. And we shall
endeavour to account for it in the following manner:
When speaking of increased temperature, we always
have reference to some thing else; and thus we
day that a fact is hotter when inflamed than the
surrounding parts, or than when in a state of health.
The degree of heat is always in proportion to the
blood contained. And as the diseases are stopped
by the deceased actions andensible transpiration
and evaporation, it no longer carries out to take
of the super abundant heat, that which would
be otherwise latent, is now quase sensible.
There is a principal in the animal economy en-
abling it to accommodate itself to the surrounding
temperature, not by chemical laws, for these
must give the animal but a narrow tenure of life,
and leave it the depot of every misfortune in
the surrounding medium. It is by taken into
view this principal, acting under the special
direction of actuality, that we are capable of accounting for
the preservation of life when the animal is exposed to a
very high, or very low temperature.
Without stopping to discuss Mr. Hunter's opinion of spasm being the cause of pain in inflammation, we pass on to what we consider a more simple and acceptable explanation. It is now well known that whatever diminishes increases the excitability and sensibility, produces the Debilitating influence in most cases beyond a certain degree, and we have already shown, that the vital energy of the heart is reduced, and consequently the susceptibility of the arteries are increased. Add to this the elevation of the blood pressure, the effusion, and consequent tubercle action, and we can readily conceive, how these mortally stultuous, but upon the stretch by the swelling become the source of such acute pain in inflammation.

We now come to account for the last characteristic of inflammation, increased pulsation. Have already assumed that the susceptibility to embarras is increased in proportion as the tone is elevated, there is no difficulty in admitting that this impelling force should make an embarras on the patient above what is natural. But how comes it to pass, that this increased pulsation is really perceptible to the touch of others? It appears to us to be easily explained by admitting that the tone of the arterial tissue is lowered and thus rendered less capable of resistance.
Dilatation in an elastic tube must always take
place in proportion as the ratio of the resistance is
to the propelling power. And under this law the
blood cells must come, for instance, by any muscular
power of their own that they can be dilated, but
have dilated by their simple elasticity acting upon
the heart. Now doubtless, the heart to have a
propelling energy of say 50 degrees, and the closing
force to rest with a power equal 30, the resistance being
equal throughout, the dilatation must be also equal.
But if by some proximate influence, the capacity for resis-
tance, in any vessel, or part of a vessel, be reduced
3 to 10 or 15 degrees, would not the dilating power, working
upon the hand, applied to this vessel, result
in greater, in proportion to the number of degrees the
tube of the vessel had been reduced below the gen-
eral standard? Certainly it would; and it appears
to us that increased dilatation can be accounted for
in this instance, in no other way, than by assuming
the vessels of a part to be more pliable, and this enabling
the heart to make a stronger impression, on
the finger. When applied — that the load of
thrombosis might be attributed in some measure, to
the difficulty, the blood meets with, in passing
through the constricted vessels, and doubt
— Galileo, and others, believe it very
entirely, to the difficulty of effort made to out-
come the obstruction —
The days continue various purposes, some anxious in a little dilatation, others more compact, in others looseness, in others clefts, and some more ferment, a few more acrid, some with a part adjoining, some with the parts circumscribed, and in the fulness in parts inflamed. We cannot admit this as the sole, or even the primary cause of increased fulness, yet the thing may be reasonably considered as a secondary cause.

We have now passed over all the phenomena of inflammation and it will be clear that we advocate the doctrine of the diminution of the inflamed parts in all its bearings.

Let us next try how far we are sustained in our views by applying these principles to the genera, more especially to the latter, inflammation.

In the treatment of inflammation, the principal object we have in mind is to bring about resolution. This is effected most easily by reducing the power of circulation. بلحق لينته لنkurk، القاتل متزامن، and by preventing the secretions. On this manner we accommodate the momentum of the circulation to the broken state of these parts.
We make use also, of local bleeding, which removes the congestion and enables the parts to recover their healthy capacities; and the application of cold, which cools the skin and renders it more pervious to the effects of the medicine that is used, lessens the size of the vessels by its mild vasoconstrictor power of contraction. The effect produced by the application of spirits of wine by Misses Phillips's employment can be accounted for in this way, without referring to the doctrine of increased action and rapidity of motion in the blood. S. Thompson after a number of experiments is compelled to admit, that there is sometimes a retardation of circulation. By these means we arrest the effusion, and the remaining time for action may be increased by the use of such medicinal produce absorptive, such as irritative friction alone, or with the scarab and nitrate of silver, or vegetable medicine. Hydropneumy, Electricity, or any other effects by means of a roller or the adhesive plaster—should be efforts to bring about resolution from a fresh incision of the part. The truest object will be to promote sublimation, which we accomplish by the application of heat and moisture, which tends to break up the walls of the vessels in a circumscibed inflammation, and a relaxation of the vessels and consequent effusion of the contents, if it be an inflammation arising in consequence of a rupture of continuity—this prepares for the healing process of granulation and subsequent cicatrizing—
We have now arrived at the conclusion of our subject, and if we have been so fortunate as to have accomplished our position we shall have accomplished our utmost expectations. If we have failed, ut Deus nos adiuvet. However, we are not alone. We have spoken in the last paper, which, is printed out to us by a Thirstling, a Baca an Allen, a Trumble and a Milton Philip amongst the Europeans and amongst our own countrymen that learned Science. And though last not least, the Latinate Might—

"Who shall decide when Doctors disagree?"

Finally. The must be borne to return our most sincere thanks to all those who have in any way contributed to the promotion of our Medical Study: either by advice or instruction, and with feeling of gratitude, we praising them in the words of Pope—

Et male de dignitate mea ero, ut letis pius;
Nate teneas uxoriam meam, sine laude celib.
Protas terrae Parthis bibet, aut Germaniae Fenice
Quam nostrum Denare labantur spectre actus.
An Inaugural Dissertation

on

Fetus

Submitted to the examination of the Professors, Provost, and Trustees of the University of Maryland

for the Degree of Doctor of Medicine

by William J. R. Brooke

of Baltimore

March 11th 1830
To Nathaniel Potter M.D.
Professor of the Theory and Practice of Physic in the University of Maryland.

This Treatise is respectfully dedicated as a Testimonial of the exalted estimation in which he is held by his former pupil.

The Author.
Remarks on Spleanus.

The disease of which I am about to give a description, is one which in former times excited terror in every medical practitioner who had the misfortune to witness a case of it. I mean Spleanus, a genus of disease in the clav, Neuraxis, and, in the order Spasmi, of Dr. Cullen, characterized by a spastic, rigidity of almost the whole body. The varieties of this disease generally described by authors are as follows, viz. Opisthotonos, in which the body is violently drawn backwards; Compressotones, in which the body is drawn forwards; Pleurothotonos, where the body is drawn to either side, and lastly Sirenum, or locked-jaw. These distinctions I conceive to be of scarcely any utility as all those different stages arise from the same causes and the mode of treatment precisely similar to each other.
Causes

Tetanic complaints may arise from a variety of causes, viz.: punctures, lacerations, amputations, fractures of the limbs, gunshot wounds. Those punctures particularly that are made by nails, splinters, or any rough instruments. The injury done to the foot by frost, cutting the umbilical cord in new-born infants, sudden application of cold to the body after it has been exposed to intense heat, particularly sleeping out on the grass in the summer season, and suffering the morning or evening dew to fall upon you. Tetanus (it has been said) arises sometimes from poisonous vegetable taken into the stomach such as, Conium Maculatum, Atropa Belladonna, Stramonium. This disease is said to occur most frequently in warm weather, but this is by no means a general rule for cases occur here sometimes in the winter. This disease affects all ages, sexes, temperaments and complexions, but the Nervous and Irritable most frequently fall victims to it.
It is asserted by some authors that Negroes are more subject to this
disease than the whites, the former it is true are more frequently
affected, in consequence of their being more liable to nails-split-
ting as they generally go barefoot.

**Symptoms**

This disease sometimes comes on suddenly to a violent degree, but
generally it increases gradually until it arrives at its maximum.
It commences with a sensation of stiffness about the back of the
neck, which increasing renders at length the motion of
head difficult and painful, accompanying this or preceding it there
is an uneasiness felt at the root of the tongue, which augmenting,
causes deglutition to be performed with difficulty, and this function
will be entirely stopped if the disease be not properly combated.

When the rigidity of the neck has arrived at its one plus ultra, a vivid
pain is felt at the Incisura Corvis, and shooting from thence into
the back, when this pain arises, the muscles of the back of the neck [in
particular] are greatly affected with spasm so as to pull the head
Backwards, the masticating muscles are simultaneously affected and the jaw are clenched so strongly that it is sometimes requisite to extract a tooth in order to introduce anything into the stomach by the mouth. This is what writers have termed locked-jaw, which is very troublesome; the tongue is frequently injured in consequence of its having been caught between the teeth. When the disease has thus far advanced, the pain at the bottom of the sternum often returns and accompanying it, the spasm of the back of the neck. As the disease progresses a great number of muscles become spasmodically affected. In succession to the muscles of the neck and jaw, are those of the back, bending the body backwards, constituting what is termed Opisthotonos. The abdominal muscles are violently affected with spasm during the whole of the disease, the abdomen consequently is retracted and feels hard like a board. The muscles of the superior extremities are not the only muscles affected for those of the inferior extremities are so rigid as to render them quite stiff. At the height of the disease,
an organ of voluntary motion seems to be affected and among the rest.

The muscles of the face, the forehead is drawn up in furrow, the eyes are
sometimes distorted and immovable in their sockets, the cheeks are drawn
backwards towards the ears, so that the whole countenance expresses
the most frightful grinning. Whilst under the influence of these
universal spasms a violent convulsion generally comes on, and
terminates the existence. The attacks of this disease are seldom
attended with fever which is very high, there may be some occasion-
ally. it is said by some authors that at the commencement
this disease the pulse is full and frequent, tense and strong, but
I believe in the majority of cases there is no fever of consequence;
and generally the pulse is weak and quick. In this disease, the head
is seldom affected with delirium or confusion of thought until the
last stage, and it is strange that the natural functions are neither
immediately nor considerably impairs, there is vomiting occasional-
ly in the early part of the disease, but this is not of long duration
And it is quite common for the appetite to be good through the whole course of the disease, and the food that is digested is small in quantity but that function appears to be in a healthy state, the excretions are sometimes, but not always affected, the urine is sometimes suppressed or voided with difficulty, the bowels are sometimes constipated, this, I think originates from the use of opium, for we have no accounts of it to prove to the contrary. This disease until very lately generally proved fatal owing very much to the manner in which it was treated by the older Practitioners. Until very lately Physicians were not acquainted with a method of cure and since a remedy has been found out and employed, many cases are cured.

It may be observed that the fatal tendency is not so unavoidable as has been supposed. In judging of the disease in particular cases we may observe, that when it comes on rapidly it is more severe than when it comes on slowly, if not properly treated it often goes fatal before the fifth or sixth day, when a patient has passed this period he may generally be considered as safe and in
general the disease is considered less dangerous the longer it has continued, however the disease is sometimes dangerous for many days after the sixth.

**Treatment**

We are now to speak of the treatment of this disease. Experience has taught us that Opium with belladonna has often proved an effectual remedy when given in large quantities in order that we may have their full effects, which are very hard to produce in this disease. I am fully persuaded that Opium is very seldom given in sufficient doses: the practice has been to give it either in a solid or liquid form in moderate doses, every two or three hours; this practice may do if its effects are not suffered to go off; however, Opium does not seem to operate in this disease as in others, for although it produces some remission of the spasms and pains, it seldom induces sleep or occasions that stupor or delirium as in other cases in which much smaller doses have been given.
It is therefore to be observed that in this affection (to use the words of Dr. Potter) there must be no retarding but it must be given by wholesale) in large quantities, and as often as the symptoms of the disease may seem to require, though the first dose that is administered may have produced some remission of the symptoms yet the effects of it do not continue long in the system, and this disease being very liable to recur it is very necessary by the time the effects of one dose are going off and (especially when there is any manifestation of a recurrence of the spasm) to repeat the dose in the same quantity as before, this practice should be strictly pursued as long as the disease shows a disposition to return. And it is not until the disease has subsided for some time and not until considerableness, and long continued remissions have taken place that the doses of Opium may be diminished and the intervals of administering them be more considerable. Opium with Mercury given in this way has been successful in many cases,
and probably they would have been so in almost all if it had
not been too sparingly employed, either from the timidity of the
practitioner or from its exhibition being prevented by that
interruption of deglutition which so often attends this disease;
which circumstance requires that the medicines should be
immediately and largely employed before deglutition is impeded.
or if this opportunity escape you, the medicine in sufficient
quantity and with due frequency must be thrown up the rectum
in the form of glisters. It has been recommended to employ some
of the Antispasmodicks with Opium such as Moscow, camphora.
This I think is a very weak practice and would answer a very
little better purpose than Opium alone. What would be the
effects of Emetics in this disease? We know they produce powerful
effects sometimes in relaxing the muscles in spasmodic and
convulsive diseases. The warm bath has been spoken of as a
remedy. Purgatives have been very highly recommended by
one of the continental Physicians, they might probably
For the account of the case related of Dr. Jackson.

vide Medical Recorder for Oct. 1826 page 315.
answer. Bloodletting should not be used except in plethoric subjects. Blistering was at one time very much used, but it is ascribed by some practitioners to be hurtful. Moxa has been used with decided advantage of late years, it should be applied all along the spine and the eschar dropped with Mercurial Ointment so as to keep a discharge for some time. I am inclined to believe that one half nearly of the remedies employed are useless. I think that wine, Opium, Moxa, and Mercury are the principal remedies in this disease, of these remedies, wine, Opium and Moxa retard its progress and prevent death from exhaustion, until the Mercury shall have time to eradicate the disease by converting the tetanic affection into a Mercurial action. Without the aid of Opium, and Wine, the Mercury would not have time to act and the two former would scarcely suffice without the aid of the latter. The Mercury (as I have hitherto observed) should always have its full effects and these
effects should be kept up for some time for if they be not, the
Sclenic affection will certainly return. The best form of using
Mercury is in that of Ointment, very extensively. Tobacco has
been found useful by Dr. Jackson of Northumberland (Pennsyl-

vania) in a case which occurred in his practice, produced by
an injury received on the back of the hand by a piece of bone.
The part had healed and he made an incision into it and
applied over it a poultice made of a strong decoction of tobacco
with linseed meal. It was applied from the hand to the shoul-
der and was changed every six hours. A similar application
was made to the Subclavicum Cordis in order to operate upon
the whole system. In six hours, the symptoms had amelio-
rated, the application was continued with the addition of castor
Oil to open the bowels. In about thirty-six hours from the first
application, the tobacco produced nausea and subsequently
so much vomiting that the whole complaint appeared to be
subdued, the tone of the patient's stomach was now restored by
nourishing food and drinks, as Cordial, Huamoas Pinture, &c.

About the same time Erysipeles of the arm came on, succeeded
by Mania à Potus, which was cured by Opium, Camphor &c.

**Prophylactics**

The best preventative of tetanus consists in converting punctured
wounds into incised ones by means of a scalpel, and the exciting
of suppuration in wounds that are lacerated. The precautions
should be taken immediately after the receipt of the injury
and before the tetanic symptoms shall have made their
appearance. If there be an objection to the dilatation of
punctured wounds by a scalpel, the application of some
Escharotic should be made, such as Bly, corrosive Sublimate,
lunar Caustic &c. These should be followed by poultices
so as to bring on suppuration. If the patient cannot swal-
low food must be then thrown into the stomach by means
of a gum-elastic tube.

**Finis**
Dissertatio inauguralis
de praedestinatione hereditaria
judicio
Praefecti - Professorum,
Regentumque,
Academiae Mariae Terrae,
pro gradu
Medicinae Doctoris,
subjecta
a Jacobo Garry.
hæc undeciesima die Mensis Martii,
1830

Fortes creantur fortibus & bonis: Hor.
Professori Nathan R. Smith,

Viro

arte & facundia insigni,

Summa virtute,

Conatus hic,

ut parvum, sed verum testimonium sit,

quantae habetur,

gratique animi pro beneficiis,

quorum memoria semper manebit,

quaecunque cum vocant terrae.

inscribitur

ab amico et discepsulo ihs.

Autore.
Portes creantur fortibus et bonis:
Est in juventas est in equis patrum
Virtus: nec imbellem servos
Progenerant aquilae columbam. Ibor.

Praedispensation hereditaria utiur ad denotandum
organum et ad aliquos morbos proprium corporis habitum, qui a
parentibus, iis morbis affectis, in generatione ad progeniem suam trans
mittitur. Hereditarias appellamus eos morbos, quos pro causa
prima statutum organorum quendam, a parentibus transmissum,
iis affectibus praedispontem, habent.

Nota characteristic morbi hereditarii est, quod in natis eadem
cetate, et medio rerum similium, in quibus parentes fuerant,
Magna e parte se manifestat: sic filius, cujus pater annos
Natus briqint mortuus est de phthisi, ejusdem aetatis aecese, sic.
Similiter situs, laborabit phaenomenis hujus morbi praecursoriis quae, eadem lege consecuta in filio, quae in patre ad finem pervenit.

Tamen, filius quamquam praedispousitus, ies rebus omnino aut in parte absentibus, quae in patre morbi patefacti n adjuverant, morbum evadere posset. Factum hoc reddit rationem quomodo sit, ut generatio tota immunes sit morbo, qui in proximo se patefactus, cur aliquos familiae et secum unum potius quam alium aggregiatur.

Algone momenti est, discrimen exponere inter hirc-

— ditarios et morbos congenitos. Acceptus eos esse congenitos, qui
infanti in utero a matre communicantur. In tali caso, infans,
morbo patefacto, in mundum venit. Maculae in cote hic generi
referi possent. Syphilis in quibusdam casibus morbus est
congenitus. Convenit inter eosdem morbos collocare mutilationes
varias, quae observantur; simulac infans "aurae therae vescitur".
cum in parte mutilata cicatrizc sit manifesta.

Tunc inter morbum congenitum et hereditarium hoc interest, quod infans nascitur cum illo et fortuitus est, sed non communicatus in coitu, nec exorients ex organica habitudine traditae in generatione, quod unam e praecipuis notis huic est. Tamen morbus e se semel congenitus et hereditarius testat, si, dum in utero foetus est, res habitus in coitu transmittae eortum favent.

Morbi, qui a nutrice infantii communicantur, nostra Sententia, congenitis similitudinem ferent. Nutrice, dixi, in dispositionem moralem infantis protestatem magnum habet. Virgilius ad eacrimendum Aeneae mentem inexorabilem facit infelicem Didonen sie legqui:

Nec tibi diva parens, generis nec Dardanus auctor;
Paride; sed duris genuit te cautibus, horrens
Caucasus, Tyrcanaeque admirant ubera Tigres.

Aeneid, lib. 4.
Non oportet morbos eos haberi hereditarios, qui proveniunt habitu debili.
Statim manifesto post ortum, cum parentes valido corpore et bono sint.
In haeret, talis habitus saepe exoritur morbis, quos gravida mater
patitur, aut natura prava vel defectu alimenti, quod capit, desiderios
Morale, triste, protracta quo laborat, luxuria et vita mollis quam
agit, cum vigilat nocte et in multum diem dormit, uno verbo, cum
se tractat, quasi hypocausti plantam, cui purus aer et frigidus nocest—
sols radius aegrotat. Habitus hic, tunc, hereditarius non est,
sed congenitus. Ideo, illius nota prima, hujus affectionibus morbidos habet.
exempli gratia: Rachiis hereditarius non habetur, cum infans ortus e
parentibus prorecta aetate, vel juvenili, si temperies sit inferma aut
pitiosa, aut labore vel morbo fructis, eo morbo laborat—

In claece hereditaria locum non damus quibusdam morbis
endemicis, qui, ut, Bronchocele, causis localibus—non vitio organico—
communicato a parentibus, manifeste producuntur. Nam, Bronchocele
a causa loci corrupit personas prima habita, et quorum parentes summa
valetudine præuntur. Infans, equidem, cujus parentes e morbo
imbute sunt, si nascitur et vitam agit in eo loco, quae endemius
est, quis impetu magis obnoxius erit. Sed, eredimus, quæ.
dispositio haec iisdem causis referri debet, quæ infantii lactentis affe-
cerent. Confirmatur, praeterea, quia Multi affectorum, patria
Mutata, hoc male se eripiant, et liberorum, qui mali se habent
in eadem regione insalubri nascuntur et integri vivant.

Leomodo conajpi potest morborum transmissio hereditaria.

Quoniam transmissio haec accidit eodem tempore puncto, quo gener-
atio, cum actu eo obviæ neeitur. Ergo, hicopus esse videatur
reminiscere varias hypotneses generatione, conditas et verismilititia eliga-
tur, causa exponendi modi, quo formatur dispositio organica—
causa Morborum hereditarium praedisponeat; et eorum
transmissionis reddente certam rationem. Sed nocte multa
et caliginosa obscuratus, generationis arcana. Quid et
esse hypothesibus delictum facere ad factum exponendum?
Cui bono? Tota vita ad hue latet, duae rationes juntim quae explorant.

Speramus, et varia phaenomena, quorum causa et fonte connectatur.

Dicamusne, exempli gratia, cum incolto Buffon

Quod si particularae interiorae (Moules interieurs) sanae non

sunt, organicae (Moleculae organiques) esse his ortae, uti

equodem partem fuerint, et partem eandem in factum, quam in

parente formare debent. Exemplum hae datas monstrat

quantum erroris in hae modo investigandi est.

Ab uno disce omnes. Aenid, lib. 2

Dionian propositum non est meum hic tractare generationem, de ea singulatim narrare omittam. Detuli sententiam
de natura morborum hereditariorum, quam confirmare

Conabor phaenomenis, quae constanter offerunt. Modashic

tutissima, iniqui videtur, quae factis experientiæ firmatis

justinetur. Quantum auxiliis in potestate habebit Medicus

qui sententiam hanc sequitur, sine ad morbi exercitum
praevendendum, sive cum eo exercer, feliciter contendere –

germinis ejus perfecte delendi, id est, cum transmitteri in halem reddere, exponer.

Opinio feri admissa de natura morborum, de quibus hie agitur, est, quod ex vire quodam consistit, quod transmiserunt a parente, morbum similum in libero producit. Heus mentis non sumus.

Quomodo, credendum est, quod causa materialis, per multos annos, in corpore inclusa, sine ullo signo operis ejus dando existit. Quomodo cadem ab una generatione tradat alteram transmitisse? Si, ita fisset, phaenomena primitiva et summa corporis vivi, exjicienda sint. Sic etsilius, Nutritio et materiae secretea, quae aliquo tempore, partem organismi constituit. Sed, si falsatur, quod humani corporis vita non producitur, nisi le renovanda quae sustinet, non possumus admittere materiam morbidam esse recte intactam,
inter ruinam et Redintegrationem, quae in gremio organisationis
unidae operatur. Sed potius Consendendum, has causas assimil
ationem pati, quae actionem eorum nociam vincit, et eas
Constituit partes organicas, donee liberatae, rebus praentibus et
quasi ad naturam propriam restitutae, eisdem organos quorum
pars fuerunt, invadunt. Sed, in haece, etiam, admittendum
est, quod hae causae, assimilatione subeunda, naturam mutat
et elementa eorum delentur et renovantur, dum aliae
Connexiones formantur, tempus denique advenire, cum, statu
primo assumpto, causae morbidae agendi partem, atque sient
sie, et accurate loquemur, virus existere non posset, quoniam
Natura eum Mutata suisset, et elementa sola apta ad
productionem eum in corpore sint eum escortus, cum locum
habeat, effects est dispositionis organicae primitivae et
impulsae relius opportunis.

Nunc, Charactere vero morborum sinceriororum
definito, perpendemus, quibus morbis hie proprie est. Prima
facie, videatur pertinere affectionibus cunctis, quae genus hum-
orum exercueunt. Morbi chronic, tamen, aptiores a parentibus
transmitti nobis apparent. Syphilis, icrofala, Epilepsia, Phthisis
Haemoptysis, Melancholia, Hysteria, Hypochondriasis, podagra.
Apoplexia, schirus et cancer, Morbi organic, cordis a gen-
ratione una ad alteram transire plerumque observantur.
Accipimus dispositionem organicam ad morbum,
peculiarem esse statum corporis totius, aut organorum nonnullorum
ob quem functiones ita aguntur, ut morbus exoritur, si homin
quodam ordine rerum sit. Diere quid conditio haece sit et
exhibere veram eum naturam non possumus. Sed, quod
existat, interdum, quibusdam signis externis conperitur.
Ita, dispositione organica ad soropulum iis externis notis con-
sociatur; comae candida, facie parum inflata, cuti tene-
ra et alba, capite magno, vice intellectus prae mature
Dispositio organica ad affectiones ardentes in vivido
colore, magna vi agendi, desideriis mobilibus, Sanguine e naso ebrò
fluente, cognositur, uno verbo, Cum Systema sanguineum, et praesertim
Capillare praepllet.

Organica dispositio nihil aliud est, quam causo
prima et praedisponens.

Dispositiones organicae, hereditariae raro existunt omni
tempore vitae, et cum sint, certos limites habent. Nam ebrace-
nientia docet, quod, quanquam praedispositio tempore ipso
impregnationis recipiatur, vis adjuvandi in morbi productione
non habet, donee organi, in quibus sita est, ad certum gradum
perfectionis et roboris perveniunt. Saepe cepat in toto, simulae
Vires organorum diminuant. Morbi ii, quae, certo tempore,
Observantur, et connexionem habent cum metatatione, quae
tune in quodam ordine organorum sit, aptissimi siue heredita-
rii sunt. Causa hujusce est simplex: nam morti, qui cum
aetate personae affectae rectentur, cum habitu ejus intimam
affinitatem habent. Ex interna atque innata praediposita
magis necessarie pendent. Ergo, Stahl dicit: si parentes
aliqua aetate, morbum illi aetate congruum insigniter
solaraverunt, infans quando illi aetate pariter adpropinguari
ipsi contingit, affectui illi idem familiaeius atque certus expositus
observatur. De haer, disp, ad var, affec-

In tenerisannis, cum systemata lymphatica et ner-
vosa praevalent et cuticula valde service deputationibus facilem
transitum praebet, acophysaet affectiones nervosae praeipue
epilepsia et febres eruptivae se patetacunt. Aetate hae, 
frequentia Convulsionum debilitati musculorum & peculiari
laboris capitis—quasi Centr Motionis, delentur. (Fb hanc)
Causam, infantiae deputationes in capite magna ex parte

Hominis affecti ies morbis, pectus male formatum, humeros elevatos, scapulas extantes, collum longum, maxillas rubreas, saepe habent. Phthisis liberorum, qui nascentur
vel cerebrī inēcitūne, callem rationis relinquat et delirus fit.
In aetate ea, mania hereditaria de patefactīt. Cædem aetāte
plusquam ullæ aliæ Mulieres hysteriæ patientur. In
aetate virili. Musculi vim novam accipiant, podagra
hereditaria adoritur. Podagra mulieres nisi habita primo
hac orripit. Eunuchi, in quibus castratio debilitatem
facit, quae muscularorum patefactioni obstat, huiæ morbonor-
exponiuntur.

Eunuchi non laborant podagræ necque calbæ sunt

Hipp. Aph. 28, sec. 6.—

In senectūte, venæ magnitudine augmentur; sed volumen
hoc e distensione mechanicæ plus quam vera pate-
factione provenit. Organizatio fit deterior, et plus aut
Minus tardè ad summam ruinam accedit; partes molles
gradatim arescent, venæ debiliiores pressuræ a latere
cedunt et distenduntur. Arteriae etiam sanguini
e corde fluente minùs ostistunt. Hac dispositione effectus aunnun
specialiter notate digni, quoad cerebrum attinet, quia
in tali modo sieceat, ut cavum ascum, in quo continetur,
non implat. Credo, hoc esse unum e praecipuis causis:
ad apoplexiæm in senectute autedisponentibus. Animadverte
propensionem sanguinis ad capita literis Studentium, sive
Ortus e vita sedentaria, sive cerebræ excitatione, quam
opera intelligentiae exigunt, et rationem habebis, cur docte
apoplexiærum obnoxii sint. Praeter dispositionem hane,
altera est hereditaria, quam habitudo apoplexiæ notat.
Caput magnum, facies rubens, collis brevis; obesitas, pulsus
fere plenus et durus, mens iræ pronus. Quid de apoplexiæ
diximus, ad paralysim applicari potest, aequa saepè
succeedit. Affectiones alteræ, de quibus dictum est
Tempus manifestationis certum non habent. Tamen
Schirrus et cancer, cordis morbi chronicæ post actatem
Virilem occurruit.

Quo modo formantur dispositiones hereditariae?

In initio homines procul dubio nati fuerunt integra
valitudine et pacosis morbis expositi. Sed, status civilis
augendo desideria nostra & collocando nos in ordine
rerum variarum, qui organisationi multum afficere valit,
item morbos multiplicavit. Primo, homines pacosis
causis expositi, quibus organisation se finxit, tantum affec-
teiones acutas et diurnas toleraverunt. Suia vita simplex
et uniusmodi fuit, dispositiones ad morbum rarò formatae,
et hae aevis perbrevis fuerunt. Contrà, tam multae causae in
organisationem hominis civilis agent, et dispositiones necessariè
augcantur, et quia, magna se parte causae hae tardè &
assiduiè agent, dispositiones firmae formantur. Cum organisa-
tione indentatem obtineunt, et transmiti aptae sunt.

Quoniam, satia factio morbi quocunque de genere causam
desponentem existire admissit, quae, ut diximus, nihil aliud est; nisi organica dispositio, si haec oritur e causis physiis aut moralibus, quae longo tempore vel magnitudine eorum actiones, stabilem impressionem in corpore fecerunt, sequitur quid dispositionis haec partem inherentem personae, ut transmittat apta est, ut temperies et idiosyncrasia.

Ut hae dispositiones concursu rerum certarum determinato provenire possint, ante concursum hunc non existunt. Hoc indicat cur Phtesis fortuita sit hereditaria in puero, qui ex parente laborante morbo patet acut nascetur, vel praeliber ante patiendum, et liberi nati ante hoc nihil ex eo timere habeant.

Quae dispositio organica certo concursu rerum formatur, concursus alter eam formatam delere protest.

Siquidem, morbus certo tempore vitae transmitti aptus, aliud non ita est, Causa haec aliquos liberos fact haeredes
parentum morborum, dum alii immuni sunt.

Iatia praeventendi morborum hereditarius trans-
misionem. Nosceimus tantum modos duos morborum her-
ditariorum transmissionis praeventieni. Id, quod astitmo
directisimun, potestisimunque e maritali conjunctione
Obtinetur. Omnibus est notum, quod unio haec valde
affiset Statum physicum atque moralem filionum, qui
esse oriantur. Condicio physica et moralis hominis aque
ae generis animalium domesticorum quius aut melius reddi
potest.

Qvortit reliquer peronam, cujus organization est dijig
milis aut opposita organizatione quae, quae dispositione apta
transmittit laborat. Exempli gratia: homo serofila laborans
mulieres simo habite et fibras siccas conjungi decet. Bodager
ducat uscitum debilem, temperiri lymphatica. Is, in cujus
familia mania est hereditaria, mulierem, cujus familia
Animi tranquillitate et serenitate insignis est, jungere debet. Tacto secunda in locando homine in medio rerum quae eus habitudini modum adhibere, et dispositionem organizeam corrigere valent. Sic, in exemplum, homo seropulâ laborans e regione frigida & humida cedat, in evolo sicco & calido vivat, carnem ajsatam et fructum dulcem capiat, maturè ad lectum se recipiat, multò manè surgat, literarum studio nimium opera non det, sub diò sine fatigatione exercet, in mari se proleât, se frict, et vestis eus sit levis et calida.

Modus corrigende metabolendi dispositiones simulac, mulier concipit, ovum ab ovariiis, ubi formatum fuit, descendit in utero a tubis Fallopìis depositur, illiè, incubatio sit. In organo hoc tanguam corpus alienigenum agit, membrana mucosa velans uterì partem internam inflammatur, & tumet.
Uterus angetur, vasa & membranae formantur, aut infammatione substantia inter duas partes vivas, vel, quod verisimilior est, partusactus partum, quae melobatio eget & quae formatae cum ovo per tempus graviditatis id comitantur.

Foetus matre conjunctus interuentu corporis, el vasorum, sanguinem necessarium vitae quae & incremento ab eo recipit. Hac connexio intima inter foetum & matrem nobis occasionem dat agendi in eum tempore, quo facilest ei modum adhibere. Igitur, dum in utero est, modus corrigendi aut abolendi dispositionem hereditariam adhibebatur.

Iuvoniam, foetui ante ortum excussus directe non patet, nosque oportet in matre agere. Modo adhibendo in matris habitu, foetus organeciam dispositionem modo

Cari postumus,
Post partum, infantis accessus directe patet; tum infirmitas et conditio imperfecta eos organorum, gelobis circumstantiis affici obnoxium reddunt. Infans nuper natus cerea similis est, quam ubi placet, durum facere possimus. Nobis tantum opus est, seire res ideonias exhiberi, modum exhibendi.

Si infans a matre dispositionem hereditariam recipit vel a patre, dum matris constititio eam saveat, ejus nostrum habitum diverso parare et disponere res circumstantes tali modo, ut, dispositio organica et primitiva aliqua e parte mutetur.

Latio praeveniendi patificationem dispositionis hereditariae ut, fieri deberet dispositionem hereditarium penes arteum semper non est, quia nimis profunde radices agit, vel tempore opportuno res proprieae non utuntur, talem nobis tantum praevenire morbi patificationem, si fieri possit.
Duo genera causarum ad producendum morbum necessaria sunt: unum, quod appellatur praedisponens, est organica dispositio, primitiva aut acquisita, diurna vel diutina; alterum, quod vocatur occasioem praebens, est res externae, quibus plus aut minus corpus afficitur. Si, nihil ad abolendam causam praedisponentem factum, aut Medicus eam eradicare non potest, suus officii est Causas amovere, quae morbi satisfaciitionem producere profint. Sic, liberi serofulae praedispotitione expositi, vivendi disciplinam antedictam observant, utio eadem proderit ad phthisem tubercularem praecipientem, quae est forma frequentissima, sub qua serofula se manifestat, Experientia praecipita haece confirmat.

Si, qui haemoptysi hereditariiæ antedisponuntur Coelum mitem & serenum incolant,—maturæ ad lectum se receipient,—labor corporis et animi moderatus sit,—
intemperantium & exercitationem violentam, quae circulationem accelerat; in pulmonibus sanguinis accumulationem facit; transitiones subitas ad calore ad friquis, vitare debent; Caperc alimentum mite, ut, lac, fructum dulcem, nihil bibere naturae exitantis ofportet.

Epilepsia, puero dando nutricem fumitate corporis pollentem, perturbari difficilem, praecvenienda est; usu frigidionis & balnei frigidii, evitando rescunetas, quae terrent aut iram quis ascendere possint. Quoniam, congestus cerebrorum infantum sunt causae morbi frequentem occasionem praelentem, contra corum vim pediluvio, & medicamentis albo sem decentibus contendere vitamur. Si, humor aliquis capite emittitur, sustineri debet. Cum nihil tale existit in hae parte, nobis appetutile, unum excitare, aut vesicatorium parum post aurem admonendo, vel ulcum artificiosum faciendo in colle.

Medicus eruditus hae modo sanatatem infantis dedit,
Cujus praevente omnibus liberis, menses notas tribus, de concuibus amigerunt.

Vires adae evacuationes saepie comitantur conulsionibus; tunc, iis suum proprium colorem flavum eddere opportet; Pulvis Rhei cum oleo mixtur se super ventrem fructus Syrupus rhei simplexe intempe exhibitis indicationem hanc peragunt.

Patetactio Maniæ hereditariae impeditur sujiendo omnibus, quae desideria auget, animi aegritudine afficiant; etiam movemur; vitam temperatam cad normam agendo, intellectus operi temperatæ incumbendo.

Si homo sit habitu sicco, bulnes, potus diluens, alimen tum mite ad eundem finem valde juvant, si, temperis sit sanquinea et sanguis fluit, non subito supprimendus.

Omnia, quibus sanguis ad caput impellitur, evitanda sunt. Hac de causa, caput tenuiter opertum sit, -
pedes calidi, & alius liber deucatur, Alcohol, sicul.

Pestis fugiendum, navigatio utilis est. Ad haec, exerçitatio in aere aperto, balnei domestici, & diluentia, causae avertendi Hypochondriacum & Melancholiam, utilia.

Omnia, quae circulationem accelerent, ut,

exerçitatio violenta, gaudium immodicum, Ira, Zelotypia a quo pulsationes duplicantur, & moestitia, ab omnibus praeditis ad cordis morbos organicos, evitanda.

Augendo corporis labore, si, nullius sit debilis

Recedendo mensium escortum facilum, Retinendo eas regulares

frictione membrorum inferiorum, tonica cum antispas-

modicis sichibendo, omnia exstasitia ad amorem ante tempus naturâ datum, vitando, Hysteriae hereditariae

Occurratur.

Exerçitatio & sobrietas podagrace hereditariae

Optimae antagonistae sunt.
Simulac, morbus hereditarius se patet acit, eadem ratione medendi, quae morbus fortuitus, eget. Tamen, attento animo, respeculium ad characterem hereditarium providamus.