University of Cincinnati Theses

Early Doctor of Medicine and Doctor of Philosophy Dissertations with Geographical Relevance

The dissertations described as either of geographical relevance or as biographical theses were presented to the University of Cincinnati for the Degree of Doctor of Medicine and/or Doctor of Philosophy, for years 1897-1917. The full-text dissertations were digitized during the 2000's. The original intent of creating the bound volumes (with their multiple errors in pagination) ceased in earlier years. To approach these errors, a separate "Corrected Pagination" has been inserted in the beginning of the volume.

The people team who have worked on this project include the Office of Copyright Services: Richard J. Bender, Historical Collections Librarian; Pamela Pulliam, Metadata Management Librarian; Angela Carpenter and Carol Harding Stoney, Research Services Specialists; Alex Kate and Megan Wright, Services Division.

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University of Maryland Theses

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.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.hshsl.umaryland.edu) and the Internet Archive (www.archive.org).

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UNIVERSITY OF MARYLAND

THESES

1867 (b)

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Finley, Samuel C.	Pneumonia
Crawford, George B.	Rheumatism
Haefner, Gustavus A.	Pneumonia
Lawson, Lemuel S.	Development of Bilious Remittent Fever
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Cotten, Joe	Veratruno Viride

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title
Jones, George H. W.	Medicatrix Naturae
White, Alward	Respiration
Wilson, Iasiah B. B.	Typhoid Fever

UNIVERSITY OF MARYLAND

THESES

1867

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AN

Inaugural Dissertation

ON

Gastritis,

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Samuel C. Dudley

of

State of Maryland.

Session Fifty Ninth. 1866-67

Costumes

de

Thesis

Sam. Smiles

Gestation

As it is [illegible] on at [illegible]
of the gestating [illegible] is said to
[illegible] [illegible] [illegible] of the
many [illegible] [illegible], [illegible] [illegible]
with the study of [illegible] [illegible], [illegible]
or inflammation of the brain.
This all [illegible] inflammatory [illegible]
it [illegible] [illegible] [illegible] too [illegible]
[illegible], [illegible] [illegible] [illegible] [illegible]. The
[illegible] being often not [illegible] is
[illegible] while the [illegible] is [illegible].
The [illegible] [illegible] and the
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] of inflammation in
the [illegible], [illegible] [illegible] [illegible]
is [illegible] [illegible] [illegible] [illegible] [illegible]
in case of [illegible] [illegible] [illegible]

which disease therefore inflammation of that most important organ, the acute gastritis we are often very much astonished to find in our own observation how seldom the stomach is the seat of inflammation when we consider its exposure [illegible] connected with the various irritants in the different degree. It is readily recognized by the presence of severe pain at the pit of the stomach with a sense of heat or burning and intolerable oppression, nausea and vomiting; the pain is increased by external pressure and by a deep inspiration, and is often terminating in the act of vomiting. The ejected substances are at first food unchanged

and afterwards tells a succession and in
often more or less tinged with blood
There is an early and profuse
of spirits with dullness & sighing and
a peculiar and striking prostration
of strength. The tongue is white and
the patient is constantly calling for
cold water though if taken too freely
it produces uneasiness and offensive
to the distension of the stomach and
is frequently immediately rejected.
The cough is at first small in
the middle and back part with
a white fur, the tongue is red,
but sometimes it is red, small, dark
and without fur from the commencement
The pulse low, the tongue and mouth

[illegible] and [illegible], the eye is dull and suffused, the bowels are almost always constipated until the termination of the inflammation, or if not as they are looser than in health. The patient lies on the back is generally [illegible] [illegible] [illegible], with an expression of face indicating anxiety and distress. The extremities grow cold, circulation languishes, respiration becomes more and more difficult and death terminates the sufferings of the patient in a period ranging from a few hours to five or five days. The prognosis of the acute character is rather unfavorable, it depends somewhat on the probable [illegible]

has given rise to the attack and the
serious condition of the patient.
If it was supposed upon a hasty
examination of any standing there
is great reason to dread a fatal
result. The cases of cutaneous
excitement without such difficulty
are rare. [illegible] to
mention as to be met by the sur-
geon. External violence is invariably
by some cause the circumstances in
which it has been avoided, exposure
to sudden and extreme changes of
temperature, the immediate use of cold
drinks of food and drink contrary
should especially. The bones crown
and nerve to suffer in a attacks of

upon other diseases than an inadequate diet often. It seems to come in the course of intemperate habits, and the liver and liver without forms such structures the gastro-enteritis phlegmonous. The autopsies have shown the vessels of the stomach rigid and the white surface of the liver coarse with a result a deep crimson tint. The stomach is more or less contracted, the whole mucous membrane is often much wasted and sometimes covered with a viscid or jellied mucus upon the surface of which it exhibits no usual marks of inflammation. Exhaustion is not uncommon, usually in patches, sometimes

an isolated patch in the gelatinous tissue forming small prominences on the surface, and attended sometimes with pigmentation, which are formerly ascribed to the cause of increasing development of the mucous follicles. The indication in the treatment of such cases are obvious and undisputed, if the disease is caused by a corrosive or acrid poison and if the stomach is not yet fully evacuated we should first remove the offending matter — either by means of emetics or copious draughts of warm water. If the nitric acid or the vegetable class, as above, which act quickly and a stomach

pump be at hand, I would without
then applying the valuable [illegible] of
evacuation and cleanse the stomach
thoroughly, but I would be [illegible]
principally upon emetics administering
at the same time substances calculated
to act as antidotes by neutralizing the
poison, and after the stomach has been
thoroughly evacuated, sulphate of
Magnesia or Castor oil should be
given with the antidote so as to
evacuate any poison which may have
passed into the bowels, if the stage
of the patient be not very [illegible]
debilitated and the system is not
under the influence of some powerful
depressing agent as in [illegible]

and the use of [illegible] should be taken for the [illegible], and if the strength and [illegible] do not fail under the loss the [illegible] may be [illegible] with a decided improvement in [illegible] on the disease. Constipation is [illegible] a [illegible] of the bowels, as it [illegible] dry, [illegible] and [illegible] are detained under the bowel. Constipation should [illegible] be indicated as constipation is an almost uniform attendant on uncomplicated rheumatism, but medicine, of no kind, [illegible] internally are almost always rejected or apt to aggravate the affection, and most authors recommend [illegible] [illegible] or [illegible] [illegible]

[illegible]

[illegible] Take off a [illegible] of the [illegible].
This [illegible] is not slightly of a real
instant to the inflamed [illegible]
and frequently calms the spasm
when small quantities of cold water
have been applied. It also diminishes
congestion of the spinal by unloading
the pelvic vein through the [illegible]
of blood. Afterwards the bowels should be
kept open by the frequent use of Enemata.
After the first violence of inflammation
has subsided, opium in some of the form
of morphine may be administered, a
full dose may be given at bedtime
and repeated in an hour or two
if it should not procure rest.

The dose should be given in pill form, combined with opium, may be repeated at such intervals as to bring the pt. completely under the mercurial influence. Half a grain to a grain of opium with or a one grain of calomel in the form of pill repeated every five, six or eight hours will generally be sufficient for the purpose. Stimulating pediluvia are employed throughout the complaint for drawing blood to the limbs at a time when these are cold and pale. In the last and most fractious cases where the symptoms indicate imminent danger the most efficient remedy is oil of turpentine with laudanum.

given frequently in small doses. The patient will derive relief from rinsing frequently [illegible] a mouthful of very cold water, or from keeping ice in the mouth but should not be allowed to drink largely. In the early stage, no other nutriment should be allowed than a solution of gum arabic, weak barley water or rice mucilaginous or farinaceous drinks, but when there is great debility fresh milk and milk from boiled milk is found both useful and lawful. In a still more advanced state, chicken broth, plain cream or cream, or may be cautiously given. Tonics, the Peruvian is one of the most

[illegible] on the [illegible] side.

Blood should be avoided by [illegible] the [illegible] and immediately [illegible] upon the lung is deemed unnecessary or inadvisable, and should be [illegible] until the symptoms give way. In the intervals [illegible] and fomentations or cataplasms should be applied on the region of the stomach and [illegible] pain appears by their weight. Cold applications and ice have been recommended as probable hemostatics. Blistering is also recommended. In the advanced stage [illegible] advantage may be taken of the [illegible] thus obtained by [illegible] [illegible] by [illegible]

[illegible] of [illegible] [illegible]
the [illegible] of the [illegible] [illegible] of
[illegible] or [illegible] of [illegible].
Chronic [illegible] is a form of [illegible]
[illegible] [illegible] [illegible]
[illegible] for a [illegible] length of
time without being suspected. There
is no distinct line of division between
this and the former variety of [illegible].
It is one among the [illegible] [illegible]
of [illegible] [illegible] [illegible] [illegible] [illegible]
the [illegible] and [illegible] [illegible]
can still [illegible] it. The first
symptoms are usually some [illegible]
in the region of the stomach after [illegible],
[illegible] or [illegible] derangement of the [illegible]
and a feeling of general discomfort

during digestion with occasional headaches and [illegible] pain in the back, vertigo, nausea and vomiting occur at the commencement. The jaundice gradually increases in intensity and density and the disease fat on a great variety of aspects depending on the degree, extent, [illegible] and character of the inflammation, the tissue of the part affected, the constitution and habits of the patient and the almost infinite diversity of spontaneous derangements. This disease cannot be from which however is so clinically variable, being sometimes acute lancinating or spasmodic, sometimes slight dull and latent

more than usual, and the patient complains of uneasiness on both sides and the pit and under the stomach. In other cases it is confined to one spot. The appetite is variable, generally more or less diminished, occasionally it is little affected and in such cases there is seldom to have that alternation in contrast to a complaining small portion of the stomach. Sleep is usually broken with a deep & good deal of wheat if moderately taken affect rest very, while hot and stimulating drinks increase the uneasiness. Belching is frequently caused by large quantities of gas being evolved in the stomach. The gas is

some extent involuntary in other forms and irritating. Vomiting is also a frequent attendant. The matter vomited are food, bile, mucus, pus and small tegumentary shreds such as constitute the sheath in this parasite. Diarrhœa is likewise, more and more abundant with a dark matter in which cell fragments is discharged from the stomach and is also found in the alvine evacuations. The discharge of these substances often afford great relief to the patient. Constipation generally exists in cases where the inflammation of the bowels. The tongue is generally coated white with a reddish margin, and the extremities [illegible]

perspiration is at first diminished, the pulse is sometimes [illegible] more frequent than that in health and may be even [illegible] or occasionally, it is irregular and intermittent usually, however increased in frequency and tension, The secretions are almost always more or less deranged, the saliva generally sour, the bile scanty, superabundant or deranged, and the urine variously deranged, There is generally great emaciation. The derangements of the sympathetic nervous system are infinitely numerous and diversified. Among the more common may be enumerated, head-ache, frontal vertigo, ringing in the ears and a dry hard cough, dyspnœa, palpitation in the epigastrium, The [illegible]

violent manner death [illegible] but in health is regained during the patient continue approaching to recovery and then relapsing and going through this alteration months before recovery or death. Under favorable circumstances of condition, position & treatment the disease is usually terminates favorably.

Anatomical characters. The mucous membrane which has been inflamed exhibits a brown or blackish color, the color is sometimes, that umber, etc. Innumerable minute black spots are seen in some instances so close to others as to give the whole surface of the membrane a dark grayish appearance. Ulceration is not unusual though less common than in inflammation of the serous tissue. The color of the blood remaining in the

[illegible] of the stomach is often [illegible] by that in [illegible] [illegible] that of intestinal [illegible]. It has been contended that efficient and [illegible] destruction of the coats of the stomach might take place after death from the action of the gastric juice. The disease with most majority of cases are mild functional affection, but it occasionally [illegible] the coats. The possible use of medicines, also of [illegible] liquors, has led some to calculate on many the most opposite causes. The only complaints with which chronic gastritis is liable to be confounded are cancerous and other organic affections of the stomach, hydrophobia, [illegible] nervous affections and dyspepsia. The treatment is very similar to that which [illegible]

[illegible] subject to the [illegible]
[illegible] state. The [illegible] and not that
[illegible] indication is the [illegible] of
[illegible] is the [illegible] of the [illegible]
General bloodletting is not often admissible
at the late period at which [illegible]
[illegible] but blood depletion is almost
always [illegible]
[illegible] is in most cases the [illegible] from
irritating injection or is sustained by them
and in [illegible] is aggravated by this
cause it is necessary to subject the patient
to strict depletion, that the [illegible]
life is not sacrificed to the violence of
the disease. It is necessary in [illegible]
it ~~[illegible]~~ to have [illegible] the

Stage of the fever. The food should be
liquid, warm, and nourishing, except
that in case the food allowed should be of
the kind most easily digested as intestinal
food, whether higher nutrition or not, is
not as a temporal interest to the trained
The mildest and most nourishing
nutriment must be selected. Mucilage, are
generally liked, but in some cases the meat
is borne, as running freely and fermentation
and the becoming highly irritating, in cases
of general debility the diet may be improved
by the addition of milk or fresh cream.
The milk may in some instances be mixed
with lemonade, as the syrup of lemon
barley and bread may be used with the
and lemonade and the cold ingredient may

Bathing with soap [illegible] [illegible]
it becomes necessary to use some nutritive
diet, soft eggs, [illegible] [illegible]
meat, [illegible] [illegible] [illegible]
[illegible] only the most acid or easily digested
Cathartics should be avoided by use of laxa
tives or Cathartics in moderate or best combined.
The gastric laxatives should be avoided and
sparingly used, magnesia is one of the best
as it causes the [illegible] of an antidote
which is often needed. Castor oil, [illegible]
& Sulphate, bitters may also be employed.
Attention should be paid to the skin, Nutrition
with the flesh [illegible] the [illegible] not lost,
according to the degree of treatment, and
general rest to the skin are also [illegible]
When there is great local suffering with

cerebral attacks small doses of morphia, sulphate of morphia, opium, milk & brandy. If the measures above given do not answer recourse may be had to the carbonate, nitrate & sulphate of zinc, sulphate of copper, and the nitrate and oxide of silver, mercurials & opiates repeated. In some obstinate cases attended with incessant vomiting, a system of entire abstinence of food by the stomach, the strength being supported by enemata with or without an opiate addition has often proved successful. Perhaps the most effectual measure next to a fresh supply of water of the diet is local bleeding from the epigastrium by leeches or cups. Perhaps by means of small blisters on the epigastrium frequently repeated or of blisters or Tartar emetic applied so as to produce a pustular eruption is highly useful

AN

Inaugural Dissertation

ON

The effects of Chloroform on the Heart.

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Edwin F. Walton,

of

South Carolina.

Session 1867, 68.

Effects of Cheerfulness on health.

It may seem strange to a casual observer, that I have taken this subject to write upon; but it is in my humble judgement one of the most essential remedies, in the treatment of all the diseases that the human body is heir to: "Be of good cheer" was the first injunction of the great Physician of souls, to those that came to Him to be healed of all manner of diseases. The wisdom of such a course of treatment, must be apparent to every intelligent Practitioner.

without taking into consideration the high authority from which it emanates. Although the day of miracles has long since passed, it is a well known fact, that faith in the ability of Physicians, and a cheerful state of mind, are very important, if not essential in the treatment of all the maladies of the present day. We know that these fearful maladies require the most desperate remedies to eradicate them. Yet how beautifully does cheerfulness in their actions, aid them. I believe that cheerfulness will invigorate those that are struggling in the arms of death. Yes one lock of

cheerfulness, one smile of gladness on the countenance of by-standers, will make his feeble pulse stronger. This was very beautifully illustrated to me, a few days ago, by a very eminent Physician of this city, who was called in consultation, to see a patient, who was laboring under a fatal disease. All gave a favorable opinion except himself, he told the man that the chances were against him, time and again, after several weeks he again carefully examined him, and found that he was improving. he told him, his symptoms were much better, and the chances were

now in his favour, his countenance at once brightened up, & it seemed as if his lease of life had been renewed. The Physician above all others, should have a cheerful disposition. I dont mean that he should be cheerful to gayety, but that his countenance should wear a cheerful aspect of hope. How often are the sick ones revived, by the words and countenance of the Physician. All sick rooms have enough to make them awful, without the tireful countenance of the Physician. So wonderful and mysterious are the intimate relations of mind and body, that

neither can be seriously impaired without afflicting both, nor the one ever be perfectly restored to health, while the other is in a languishing state. Many very remarkable physical results have been obtained, through the agency of mental actions, and much here might be accomplished by the judicious application of this mysterious power. All are doubtless acquainted with the facts recorded of criminals who have actually died from the effects of an impression made upon their minds. Cases are often found who have been hopelessly prostrated & thus rendered the easy subjects of

diseases by mental shock or depression. I cannot in the space allotted me, on the present occasion attempt to discuss the whole of this important & interesting subject, but will confine myself for the present to the therapeutics of cheerfulness. I dare assert that those who will give it a thorough trial, will not only find it a valuable therapeutic agent within itself, but an indispensable adjuvant in many cases, to all other remedies. But first how is it obtained, it is a product of nature, and springs up spontaneously wherever human beings are found to cherish and protect

it against the insidious encroachments of contracting causes. Much may be gained by proper cultivation for this purpose. So armed with a clear conscience and a fixed laudable purpose, root out as far as possible the noxious weeds of vice and superstition, endeavor at all times to have something to do, something to love and something to hope for, and when you meet with trials and disappointments, as every one must, dont fly into a passion, then relax into melancholy, dont be cast down by trifles. Look at the bright side & be thankful & march cheerfully on, & console

yourself by thinking it might of been worse, never give over past troubles, but endeavor to make amends for the failures of the past, by continual and increased diligence in the future, counterbalancing material losses by the increased knowledge gained. These few simple directions if carefully followed will enable the most humble in life to procure a sufficiency of the generous article for all practicable purposes. There is no danger of taking an over dose, you can take it either alone, or in combination with some other remedy. Physiological effects, It is a stimulant-tonic, stpo-

ific, Catalyctic, anti-scorbutic and prophylactic. I will not attempt to explain the "Modus operandi" of its actions, as that would carry me deeper into the subject than I am prepared to go. The facts are however sufficient for practical purposes. First: Then it is a stimulant; it increases quicken and invigorates the vital actions and energies, it is preferable to all other stimulants, because its effects are more permanent; Secondly, It will not lose its effects by long continued use, Thirdly, It is not followed by any unpleasant reactions, which too often counteracts the good effects of the stimulant.

Fourthly, It is in the reach of all who will take the trouble, or more properly the pleasure of obtaining it.
Fifthly. It enables those who use it habitually through life, to pass through its arduous paths, with more ease and comfort to themselves and more pleasure to those around them.
Cheerfulness has also a tonic effect, this may be due partly to the general stimulation, but more especially to increased digestion and stimulation. That the state of mind does exert a very powerful influence over these functions, there can be no possible doubt. We may set down to the table with a keen appetite, and if nothing oc-

cuns to disturb the tranquility of the mind, we may eat bountifully of whatever is before us, but let a disagreeable conversation arise, or some sad intelligence be received, or anything occur to disturb the spirits, and cast a gloom over the mind, at once all desire for food is gone, the stomach now loathing the very food which it a few moments before so much craved. Who ever saw a person who was habitually merry suffer from Dyspepsia. We see moreover that those from habit, necessity or motives of avarice, who allow themselves no time for amusement or recreation but swallow their meals hastily, and

him hurry off to business, their minds in a continual strain & who suffer themselves to become vexed or excited about trifles or dejected and melancholy, or as it were to raise the flood gates of sorrow and despair for a mere trifling offense, which ought to be passed over unnoticed and uncared for, such persons as a general rule become the early subjects of Dyspepsia or general debility. It is true these habits may produce depression and melancholy, yet it is equally true that melancholy will produce indigestion. & thus they go on produ-

cing and reproducing each other, until the whole system both mental and physical is prostrated. I will here assert that the habitual practice of devoting one hour after meals to some cheerful amusement, or pleasant conversation, or anything that tends to gladness or cheer the heart, and at the same time relax the labors of the mind and body, will in my opinion promote digestion more than all the medicines on the shelves of the Apothecaries. It acts also as a soporific, it enables the patient the full benefit of Kind "Natures sweet restor-

taking effect", the absence of which according to Headland more than any other symptom exhaust the patient and hastens him to an early grave. It may serve as a digestive, that is it produces a good result by its presence, like the presence of a landlord among laborers, he may do nothing at all, yet his mere presence will make a wonderful difference in the amount of work done. It is an antiscorbutic. Surgeons of ships who have been on long sea voyages, where scurvy often times prevails to an alarming extent tell us that when all the usual remedies had failed the mere

announcement that they were about to return home, has produced a marked change, and all of those who were effected with this horrible disease the mere thought of returning to their families and loved ones, have entirely recovered before reaching home without any other treatment. One instance is recorded in which all the fresh meats and vegetables were exhausted, prophylactics that are essential as a preventative of scurvy, yet that dreadful disease was successfully combatted by the establishment of games, gymnastics, and various amusements in which all on board participated daily. We now come

to the most interesting feature of this and all other remedies viz, prophylactic influence, it is an old maxim that an "ounce of prevention, is worth a pound of cure," as a prophylactic our remedy has no superior, we see this demonstrated in every days life, especially during epidemics when we see the timid and fearful who live in constant dread and under the depressing influence of fear, are often the first to be attacked, while others go fearlessly amid the scenes of its ravages, animated by the urgency of the occasion have defied with sinking the most infectious disease, we have

A great illustration of this fact in the fable where the angel of death was bearing the orders to make a levy on some great city. Just before entering the city, he met a man going to Kill. The man asked him whither he was going, he said I am going to bear this order to your city, that ten thousand of its inhabitants shall die before twenty-four hours with Cholera. On leaving the city he met the man near the same place, he asked the angel if the order had been executed, he replied yes, that twenty thousand had died, ten thousand from Cholera and ten thousand from fear. We see on

every side numbers who are rarely ever sick as long as peace and prosperity crown their efforts, but when misfortune overtakes them and suddenly blights their earthly hopes and prospects, they often become so absolutely prostrated, "time and again before death the heart-sick" yes, they become the easy prey of every disease that happens to be prevailing. We see this fact beautifully verified, if we look at the history of the past-war. We see in nearly every instance that the successful army while in fine health, and success crowning their efforts and victories being won

on every side they are scarcely ever at-
tacked with Scurvy, Diarrhea and
other diseases that the unsuccessful
armies are so often troubled with.
Now if you allow the scene to change
and the successful army become the
unsuccessful, if defeated time and
again, and their spirits become deje-
cted and their minds troubled, then
you see the diseases commence. Now
it seems that the state of mind has
a great influence over the body, preven-
ing or warding off, and sometimes
actually cure the disease. We see in
the time of Queen Anne and as late as
King George III of England and Louis
the XVI of France, that the people had

great faith in the royal touch in the cure of scrofula, and it is said, that a great many were cured, their faith being so strong in the belief of it. Now it seems that patients should have faith in the medicines they take, in order to hasten the cure of disease. Dr Samuel Dixon tells us that he has often administered bread pills to his patients, and they would come back for a milder cathartic, We see then that health and happiness are normal conditions, while disease and death are abnormal and never could have existed without an exciting cause, were it possible to find out and remove the cause the

effect would of course be arrested.
Let us now look back at the history
of our fallen race and see whether
we can discover the primary cause
of the innumerable diseases that
now afflict mankind. Man was
created pure, upright and happy,
and had he continued in that
state of innocence he certainly
never would of needed a Physician
for how was it possible for disease
to gain admittance in that delight-
ful Paradise where all was joy and
bliss, requiring no apparel to pro-
tect them from the scorching
rays of the "Summers sun, nor the
chilling blast of winters storm" then

only labor was the agreeable task of beautifying the garden, adapting it to their own taste, Hunger and thirst only increase their pleasure by inviting them to partake of the delicious fruits that grew so luxuriantly around them, and food and drink of the cooling water that burst as clear as crystal from every hill side. Beasts of every variety sported around them, and the air filled with melodious sounds from the sweet songs of birds of beautiful plumage, while the most lovely flowers and shrubs shed their fragrance on every side, in short all Nature seemed to strive in one grand effort to cheer and gladden

Reflecting on this, how much we are led to appreciate and admire the "workings of "Nature and Natures God" What do we see here that could act either as a predisposing or exciting cause of disease. But as time rolls on, being driven out of the garden, they wandered out into the wild wilderness, where the earth yielded her fruits no longer spontaneous, they must necessarily procure their bread by toilsome labor, Here they are continually harassed by cares and disappointments of life, as well as the stinging pangs of a guilty conscience, filled with shame and self reproach for

having forfeited a condition of never ending bliss for a momentary gratification of one trivial desire, depressed by fear they shrink with terror and dismay from the presence of a sin avenging God, those animals that had been a scene of delight and pleasure, now only increased their fears and added cares to their depressed minds. This scene is one of great reflection, when we are living a cheerful and happy life we should be contented. We often see men trying from the time of maturity until death endeavoring to collect stores of wealth which often proves an additional tax

to their already over-burden minds. We also often see men in their vain attempt to drown the troubles and sufferings of an over-burden mind, not unfrequently plunge into excess, debauchery and intoxication, from which he arises only to find that his troubles have been aggravated by a momentary relief, yet he repeats the attempt and thus continues until both mind and body are hopelessly prostrated, not only thus increasing his own misery, but very often the happiness of friends and relatives are for-ever destroyed. Here one may find abundant causes either remote or proximate

for almost all the diseases, that effect our sin stricken and afflicted race. Now were it possible to restore man to his normal condition, we might dispense with Physicians, this we cannot hope to accomplish, yet we ought to strive as to do, instead of getting better, we see it growing worse every day, new and more fatal diseases attacking man constantly. Now will I say to the men of our profession for us to be cheerful kind and generous to mankind, and let it be our motto to work faithfully for the good of humanity; next

arm yourselves with the Physicians best-medicines, and the Surgeons equipments, and know how to use them, to an advantage, then you will not need a white marble stone for your epitaph with inscriptions upon it; for it will be written in the hearts of the People.

AN

Inaugural Dissertation

ON

Opium

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Henry S. Howard

of

Montgomery Alabama

Session 1866 & 7

As I have had some little personal experience in raising the Poppy, and in the manufacture of Opium during this last, and unfortunate war. I will treat of Opium, and its culture in East Alabama. I believe there are only two kinds of Poppy recognized by the U. S. Pharmacopeia. The White and the Black; but the varieties are innumerable. I myself have seen as many as twenty five. There is first the single white, of four petals, (and of which I will treat most particularly) then the double white, the half double white; the fringed edge white; and the white with large and small petals. Now there are not only these

varieties of white; but of several other colors.

Works upon Materia Medica speak of the Black Poppy. I dont think I ever saw a Black variety, but I have seen a dark purple, though much inferior to the white. I have alluded to the varieties of the White Poppy, But there are also the same varieties of the Red, Dark Purple, Variegated and several others; in fact of almost any color. But I will now (imitating the work on Materia Medica) throw them all aside, reserving the single white.

To raise the Poppy in East-Alabama with any success, it should be planted in the fall, from the first to the middle of October. It can be planted

in March, but it does not reach the same perfection, as when planted in the fall. To begin the cultivation of the Poppy, the ground should be richly manured. The plant will come up in the course of two weeks or more, but will not grow higher than a foot; or that high until the next spring; unlis the winter is very warm. It is a plant that neither cold nor rain injures, that is in the Southern climate. I have seen it look a little blasted from a long continued spell of cold weather, but it immediately recovered upon the decline of the weather. I should state that the leaves which is upon the stalk during the winter (not more than four) never become any wider than my little

finger, and not quite so long until spring when they begin to mature with the stalk.

It is a plant as I have just stated that the southern climate does not injure, but it seems, after it has grown to the height and its leaves have come out to the extent I have just mentioned, it comes to a stand, and so remains until the next spring, the stalk alone increasing a little in size, unless, as I have stated the winter is exceedingly warm, when it shoots up to the heighth of two to five feet; and then sends forth a flower, which has much the characteristic odor of Opium.

After the petals have dropped from the head, it is then that the capsule is sufficiently matured to gather the Opium.

I began the cultivation of Opium in the year 1862. Twenty three Miles east of Montgomery Alabama. I cultivated fifteen acres of Popapies the 1st year, ten of which were planted in drills, and five sowed broad cast. But they do not become so fully developed or matured when sowed broad cast. I should have said that I planted all varieties the 1st year, but I soon discarded all except the single white, though then ignorant of the different qualities that the varieties yeilded, as I had not at that time began the study of Medicine, but from the mere fact that the single yeilded the most gum. Our mode of gathering Opium is a little diffirent from that stated in works upon

Materia Medica; there we are told to let the gum remain on the capsule for 24 hours or more before being scraped off. Now we have to gather it immediately, as it runs out at once on incision; we also collect from the same cut about eight hours afterward, as it keeps accumulating. Then we cut off the top of the stalk and gather what runs from that, (which is only one or two drops.

After we have collected a sufficient quantity, we roll it into one mass and wrap it up in poppy leaves. I may as well state here, that when I began the cultivation of Opium, it was only selling at $200,00 an ounce in "Confederate money". A peculiarity

in collecting Opium, is the affects produced upon persons gathering it. It does not affect every one, or every one in the same way, though there are very few who escapes the affects of the eminations. I never could gather it my-self nor, become accustomed to it, as others did.

It even gave me a drowsy feeling to ride through the feild.

Gathering opium always gave me a severe head-ache, some felt a relaxation of the system, and other symptoms of irregular nervous action, which soon passed off. but in my own case, it generally lasted me for several days.

As I have given my own experience in raising the Poppy, and gathering

the Opium, I will now treat of Opium medicinally and discribe its History as furnished us in most of our text Books. The White Poppy is one the most anciently known, and discribed plants. It appears to have been cultivated as early as the age in which Homer lived. It is uncertain at what period it was introduced into medicine. Hippocrates appears to have been the first who used it for its medicinal qualities.

The Poppy is an annual herb, with a tapering root; a stem from two to five feet high, as I have stated before; leaves large, and of a dark green color. Any single poppy has four petals, and they

are of the color that distinguishes their variety, though the White and Black are only recognized as fit for medi-cal purposes. The White has white seed, and petals. the Black, red violet, and according to Pariera even white. These varieties are grown in Persia, Turkey, Egypt, various parts of Europe, and the United States. The White as I have already stated is deemed the best of the two, or of all.
The young plants were used by the Persians as an article of food.
I have my-self seen negroes in the Eastern part of Alabama eat the leaves as they would eat greens. The Romans used the seed in the preparations of

dainties. The oil made from the seed resembles olive oil, and is often used as a substitute for it in culinary and pharmaceutic purposes; in painting, and in the manufacture of soap. I have used the oil in painting, but I cannot say that it is a full substitute for olive oil. In the north of France the Black Poppy is extensively raised for the seed alone. In the United States it is raised as an ornamental flower mostly. In many parts of Europe it grows wild. I have mentioned in my experience, that the capsule is the part from which the opium is procured, the mode of gathering it, I dont think I fully explained, it is

as follows, in a day or two after the flower has dropped, or the petals have fallen from the capsule, incisions are made in the head or capsule, care being taken that they do not enter the internal cavity. Immedeately upon incision a white milky concrete juice flows out, which is allowed to remain (except in the south, that being such a warm climate, it drips from the capsule instead of becoming dry as it accumulates at the incision) for a space of 24 hours, and it is then scraped off and kneaded into a cake or ball with saliva instead of water, which latter agent causes it to spoil. Each capsule yeilds oni-

-um only once. Their is another kind of opium made by bruising the capsules in water, after all the juice that could be extracted in the usual manner, it is inspissated, and thus an inferior quality of opium is obtained. Opium is adulterated in many ways, various substances are incorporated with it, the stems and leaves, pieces of metal, different kind of gums &c. In commerce several kinds are known. 1st from Turkey, two varieties, Smyrna and Constantinople The former yielding 13 per cent of Morphia, and is the best we have. The Constantinople is almost identical with the Smyrna. 2nd Egyptian, inferior to either of the former, containing only

6 or 7 per-cent of Morphia. 3rd India Opium, of two varieties, 1st Bengal or Patna, contains about 1/8 less Morphia (about 8 per cent) than Persian, 2nd Malwa, contains about 9 per cent of Morphia. Pereira has two kinds of this, besides that made in Bombay, which he calls C-utch, and yet another, Kandeist. 4th Persian or Trebezond, according to Wood & Bache has 3 per-cent of Morphia, but by Pereira it is said to contain only 1 per-cent. 5th German, yeilds 6 per-cent of Morphia. 6th French, said to con-tain as high as 22 per-cent of Morphia.

Opium is considered as inferior when it is of a blackish color, weak smell, sw-et instead of a nauseous and bitter taste,

It should not impart a deep brown color to the saliva, nor form a thick viscid solution with water. The properties of good Opium are a peculiar strong narcotic odour, a bitter some what acrid taste, when long chewed it irritates the mouth and, may even blister it. When drawn over paper it leaves an interrupted trace of a light brown colour. On exposure it become brittle, and being pulverized it makes a yellowish brown powder. Opium burns readily and, is partially soluble in alcohol, water, ether, wine, and vinegar, imparting to all a deep brown colour. Opium contains the following principles, 1st a volatile odorous principle of which nothing is known. 2nd Codeia

Its salts are the Nitrate, Tannate and Hydrochlorate of Morphia and, Codeia; Codeia has more of the stifening or paralyzing effects of Opium, one grain of it is equal to ½ of Morphia. 3rd " Narcotina; possesses but little activity. 4th " Narcein, it is believed to be inert. 5th " Meconine thought to be inert. 6th " Thebaina or Paramorphia, one grain injected into the jugular vein of a dog acts like Strychnia, producing Tetanus, and, death in a few minutes. 7th " Pseudomorphia, probably some preparation of Morphia in which it has lost its poisonous properties. 8th " Porphyroxin, of this, nothing definite is known. 9th " Resin. 10th " Extractive supposed to be one of the active principles

of Opium. 11th Fatty Matter, which is united with alkalies to form soaps. 12th Meconic Acid, an inert substance. 13th Morphia, the only one of its constituents, which figures to any great extent in Pharmacy. It was discovered by Sertürner, a German Chemist. To this principle Opium owes almost its entire strength. It is insoluble in cold, but soluble in water at 212° Farenheit, slightly soluble in cold and freely so in boiling alcohol, which deposits it again on cooling. With the Acids it forms salts which are generally soluble and decomposed by the alkalies. Morphia and its salts by the action of Nitric Acid assume a blood red

colour, and a blue colour with Sesquioxide of Iron. It is precipitated from its salts by an infusion of Galls or other vegetable astringents, but not by an infusion of Gallic Acid. Morphia assumes the form of small white crystals without smell and of bitter taste. The Salts of Morphia are the Sulphate, Muriate, and Acetate, very similar in their therapeutical effects. They have the anodyne soporific and diaphoretic powers of Opium, but are less stimulant, and less apt to constipate, and leave behind ill effects, as nausea and head-ache, They are usually more acceptable to an irritable stomach, and are applicable in all cases where a narcotic is desired, but

are very efficient in the suppression of morbid discharges, and as stimulants in low forms of disease. They are secondarily applicable (in cases which do not admit of their internal administration) in being spread (in liquid state) on an abraided surface, acting as when administered internally. It is also used extensively by some hypodermically in doses from 1/8 to 1/4 of a grain. They are particularly suitable in asthenalgic affections, and in obstinate sickness of the stomach, applied on the Epigastrium their act on the system at large. If the effect is to be local they should be applied as near the affected part as possible. In over doses they induce symptoms of narcotic poisoning.

Should an over dose of these agents be taken, Emetics call for immediately on account of their prompt action. Sulphate of Zinc or Tartar Emetic &c. The patient should not be allowed to sleep. To overcome the debility arising from the poisoning, Carbonate of Ammonia may be employed internally, with sinapisms, and friction to the surface.

Death takes place by the Lungs; in consequence of a suspension of the cerebral influence necessary to sustain the respiratory functions. One grain is equivalent to six grains of Opium. Dose from 1/4 to 1/2 gr., although as much as two grains may be taken with no ill effects. The incompatibles are the alkalies,

and all the vegetable infusions containing Tannic and Gallic Acid. Opium is a stimulating narcotic. Taken by a person in health, it increases the force, frequency, and fulness of the pulse, augments the temperature of the skin, quickens the senses and animates the spirits, exciting the brain almost to intoxication or delirium. In a short time this ceases and the mind becomes delightfully placid, the individual submitting himself to a current of sweet and pleasing fancies. At the end of half an hour he looses all consciousness in a quiet and peaceful slumber, lasting eight hours or more.

On awaking he suffers from head-

ache, nausea and other symptoms of irregular nervous action, which soon ceas off. All the secretions except that of the skin are suspended or diminished. The peristaltic motion of the bowels is lessened, pain is allayed, the muscles are relaxed, and nervous irritation is relieved. Opium seems to exert a deadly effect on certain plants. The Mimosa, soon dies if watered with an aqueous solution of Opium. The effects of Opium on the animal kingdom have a relation to the degree of developement, and influence of the nervous system. In small doses from 1/4 to 1/2 gr it generally acts as a stimulant. Given in a full medicinal dose (2 to 4 gr)

it generally acts as an excitant which is soon followed by that of depression. The pulse is reduced below the natural standard, the mouth and throat become dry, the appetite diminishes, thirst increases, and frequently nausea and vomiting are produced. The symptoms of excitement soon pass away and a state of torpor succeeds. The patient is listless and his ideas become confused. He is cased with an irresistible desire to sleep, which is frequently attended by dreams, sometimes of a pleasing and at others of a frightful nature. These effects are usually succeeded by a furred tongue, head-ache and listlessness. Given in a poisonous dose it produces giddiness,

and stupor; the latter rapidly increasing the patient becoming motionless and insensible to external impressions, breathing shortly with eyes shut and pupils contracted, and the whole expression of the countenance, that of perfect repose. As the deadly effects increase, the features assume a ghastly hue, the pulse very much reduced, so much so as to be almost unperceptible, the muscles relaxing and unless timely aid be procured, speedy death ensues. Should the patient recover the critical danger, it is followed by prolonged sleep, lasting 24 to 36 hours after which nausea, vomiting and loathing of food. In the East, Opium is used in the place of Alcoholic spirits, which

is forbiddened by the religion of that country, yet the inhabitants will stupify themselves by chewing and smoking Opium. The effects on the system are powerful and lasting. The smoker is affected by deterioration of the mental faculties, debility, emaciation, appetite destroyed or depraved. In the morning the poor creature has a most wretched appearance; apparently not at all refreshed by sleep of the previous night; however profound. There is a repetition of the smoke called for, which if not indulged in, causes great sufferings viz: the sufferer is attacked by vertigo, torpor, and discharge of water from the eyes. Pains are felt all over the body; A general feeling of wor-

-lhedness come on and if he be not allowed to indulge in what has now become to him a necessary, rather than a luxury, (his smoke) he speedily dies. The offsperings of Opium eaters are stunted, and weakly. The habitual Opium eater is easily recognized by his appearance. He has a total attenuation of body, a lame gait; a bending of the spine and glossy and deep sunken eyes. His digestive organs are in the highest degree distended, his mental and bodily powers are destroyed, he is impotent. After long indulgence he becomes subject to violent pains, to which Opium brings no relief. If an Opium Eater contracts the habit at an early age, he seldome ar-

river at the age of forty. It appears that those Chinese who are in easy circumstances do not suffer from this vice as much as those who live in poverty and distress. Taken in small or moderate doses, Opium first produces excitement of the vascular system of the brain, which is followed by depression. In large or poisonous doses, the leading symptom is sopor, from which the patient can be aroused. In the latter stage of poisoning, the patient is in a state of coma from which he can not be aroused. Another effect is diminished sensibility. The eyes are insensible to light, and the ears to sound. The effects on the digestion are, that it diminishes secretion, and

exhalation from the whole alimentary canal, it causes dryness of the mouth, and lessens the appetite, or confines the bowels. Opium by means of its sedative influence, possesses some power over the heart; which being a muscle, is relaxed and thereby weakened; hence the increased, and diminished force of the pulse. It acts on the respiratory muscles as it does on muscles generally: 1st by stimulation and then followed by depression. It is said that it checks arterialization of the blood, by diminishing the supply of nervous agency by means of which it is carbonized. It is said to have some power also, over the membrane lining the trachea, bron-

chial tubes and cells. The amount of influence exercised on the Kidneys by Opium has not been ascertained; some authors being of the opinion that it increases, others that it diminishes the secretion of urine. It is generally believed however, that if small doses be taken, the quantity of urine will be small, turbid and thick. In some conditions of the system, Opium does certainly lessen the quantity secreted. In some of the Eastern countries, it is used as an aphrodisiac. Opium is conceded to be the most valuable remedy in the whole class of remedies. Frequently in the administration of remedies if we are unable to ob-

lain the exact medicine, we use a substitute. but for Opium there is none. One great point gained in the administration of Opium is, that we do not have long to wait for it effects; but perceive them almost immedeatily. It operation too is attended with no pain or discomfort (unless an over dose be taken) It is used in almost every ailment to which suffering man is liable. It is used, to relieve pain, to check profuse mucus discharges, to promote perspiration, to induce sleep, and in fractional doses to induce wakefulness. From the effect of Opium on the brain we find that it is contra indicated in Apoplexy. Pneume-

-lis, Paralysis, and all kindred diseases.

In Delirium Tremens, it is par excellence the remedy, given with a view to promote sleep, for without sleep, your patient laboring under this most distressing malady must inevitably die. Upon taking a dose of some preparation of Opium he goes into a peaceful slumber, and, awake an almost well man; in this disease we could could not get on without it. From the manner in which it operates on the digestive organs, we may be induced to make the following deductions; that Opium is objectionable in diminished secretion from the Gastro Intestinal Membrane, in extreme thirst, in loss of appetite, weak digestion, and diminish-

-ed secretion of bile. It is admirable to diminish hunger; to allay pains, (if not accompanied by inflammation), to diminish the sensibilities of the digestive organs, in the passage of biliary calculi, in vascular excitement with great loss of power, as after hemorrhage: and in various morbid conditions of the pulse, attended with acute pain or spasm, but without visceral inflammation. Opium often proves to be a serviceable remedy. From the known influence exerted by opium on the respiratory organs, we infer, that it is contra indicated where there is any difficulty of breathing, arising from the want of a due supply of nervous energy.

Opium is a stimulating narcotic. Taken in quantities sufficient to destroy life, we find after a brief period of excitement; the pulse reduced in frequency though not in force. The muscles relaxed, a feeling of drowsiness supervenes, which ends in a deep apoplectic sleep; the respiration stertorous, the countenance of a dark hue, and almost total insensibility to persons, and things. Should you be able to arouse him (which is with difficulty) he soon relapses into his former lithargic state. After the lapse of six or eight hours you will find him with a cool clammy skin, extremities cold, a feeble, thread like pulse, a slow and almost gasping

respiration, and a torpor almost like death. Death soon takes place unless relief be afforded. The proper means to be employed to give relief are, to employ the stomach pump, or, if the instrument be not attainable, an Emetic should be administered, Sulphate of Zinc on account of its prompt action is preferable. The operation of the emetic should be hastened by warm drinks. The patient should be kept in motion. If the opium be taken in pill, the emetic is better, as the tube may be too small to admit the pill or bolus. The poison having been removed from the stomach, the next indication is to relieve the debility, which may alarming or even fatal. For this

purpose the Carbonate of Ammonia with wine whey, and sinapisms and frictions to the surface. Opium is usually administered in substance, or tincture; when given in substance it should be given in the form of pill, which should be made of the powder, rather than a piece broken from the cake, as this is more readily dissolved by the liquids in the stomach, and therefore acts more speedily and readily. The dose of Opium is very variable. In catarrh we give ½ grain, while in Tetanus we sometimes give as much as two drahms in 24 hours. Wood and Bache mentions a case of carcinoma of the uterus in which the patient took three ounces, or its equivalent in the course of 24 hours. Opium is employed

in substance as an anodyne in the form of a cataplasm in Gout and rheumatism. Death has been known to occur from a cataplasm having been applied to the epigastrium. The dose of Laudanum is from 15 to 30 gtt, yet a much larger quantity may be taken without any immediate unpleasant effects showing themselves. The celebrated English Opium eater, Dr. Quincy, was in the habit of consuming O iii daily. There are many preparations of Opium. Paregoric, The Wine, Vinegar Extract &c &c.

H. S. Howard

1867

AN

Inaugural Dissertation

ON

Pneumonia

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Samuel C. Finley,

Of

Maryland.

Session of 1866.7

Pneumonia.

Pneumonia signifies in the widest sense, inflammation of the parenchyma, or spongy tissue of the lung. There are several varieties of pneumonia which are founded upon the different parts of the lung which may be inflamed, and upon the character of the accompanying fever, or general state of the system. The inflammation may affect a considerable part of the lung, occupying a lobe or even the whole of one or both lungs. The lobar

is the most common variety and the one which I have selected for the subject of the following remarks.

As we obtain a knowledge of the situation and extent of Pneumonia, and all the symptoms that give us the surest information of the character of the disease, by means of Auscultation and percussion, it becomes necessary that we should first become familiar with those changes which are wrought in the lung by inflammation, in order to understand the morbid anatomy of pneumonia, as a groundwork

for obtaining a knowledge of its pathology.

There are three well marked stages of pneumonia, named respectively Congestion, Red and Gray Hepatization.

In the first stage or that of congestion the portion of lung affected is of a deep red color, crepitates less under pressure than sound lung, retains the impression of the finger, and when cut there exudes a bloody and frothy serum. It is more solid and heavy, but less tenacious than in health, and still floats in water, notwithstanding its

great increase of density. The cells are not yet obliterated, and, tho' greatly obstructed by extravasation, still contain air. If the disease is arrested in this stage, the lung reassumes its healthy appearance, if not it passes into the —

Second stage, or that of red hepatization, which is characterized by a reddish-brown or grayish-red color, the absence of crepitation under pressure; by such an increase of density that the diseased lung sinks in water, and a loss of cohesion still greater than in the

first stage. The softening is so great, that the finger may be passed through the lung with but little resistance; when cut, the lung bears a close resemblance to the liver, and from this circumstance it has received the name of red hepatization. When pressed, it exudes a reddish fluid, which is more consistent, and less frothy, than that observed under similar circumstances in the stage of congestion. The cut surface of the lung generally presents a granular appearance, which is probably due

to the air cells being filled and distended with a concrete and albuminous secretion. The surface sometimes instead of being granular, is observed to be quite smooth and uniform, especially in the pneumonia of infancy and that of advanced life, probably in consequence of the obliteration of the cells by the pressure of the effused matter; the same appearance is presented when a portion of lung has become inflamed by the pressure caused by a pleuritic effusion.

In the stage of gray hepatization, the lung is compact and dense, as in the second stage, but presents instead of the dark red color, both externally and within, a yellowish, or grayish appearance, and when cut exudes a yellowish opaque, pus like fluid, which is sometimes stained with blood. It is so soft, that if pressed, it is almost wholly converted into a purulent fluid, with only shreds of the solid tissue remaining. A very moderate degree of force will produce a cavity in its substance, which gradually

fills with pus, which may very easily be mistaken for abscess. (Abscess is a very uncommon consequence of pneumonia, ~~although~~ it does occasionally occur; abscess of parts in the immediate vicinity of the pleural cavity, liver sometimes open into the lung, and form cavities in its substance. Tubercular vomicae and enlarged bronchial tubes filled with pus have occasionally been mistaken for abscess. But it is exceedingly rare to meet with abscess as a consequence of common pneumonia. In several hundred

cases, examined by Laennec, of persons who had died of pneumonia, he met with only five or six cases of true abscess.

In the great majority of cases the inflammation is confined to one lung; and to the right much more frequently than to the left; and the lower, also, are more obnoxious to the disease than the upper lobes. Of fourteen hundred and thirty cases collected by M. Grisolle, it appears that the cases of double pneumonia were about 18 per ct. of the whole number, those of the left side 30 per ct. and those of the right side 52 per ct.

Symptoms.— In the majority of cases, this disease is ushered in with a chill, followed by fever and increased action of the circulation; difficult breathing, cough and acute pain in the side or back part of the chest. Sometimes the fever and local symptoms occur without a chill: and again the local symptoms precede the general. The severe pain of pneumonia appears to be present in those cases only in which the disease is accompanied by some degree of pleurisy. The pain is generally situated in the mammary region, but it may exist

in almost any part of the chest. Commonly it is most violent at the commencement of the attack, but declines gradually, and ceases altogether sometime before the disappearance of the pneumonia. The pain is very much increased by a full breath, coughing, and by pressure made between the ribs.

The respiration is always quickened. The number of respirations may be increased from eighteen or twenty,—the average number in health,—to thirty forty, or even sixty in a minute. At the same time there is almost always a feeling of oppression which is

increased by speaking or coughing. The dyspnoea is sometimes so slight, as to escape the notice of the patient himself, but at other times it is so great, that the patient is unable to lie down, his face becomes livid or pale, and is expressive of the utmost distress.

There is always more or less cough, present in the course of pneumonia; in some instances it is very violent and painful, in others it is but slight and occasions little or no uneasiness. At first it is dry or attended only with a little

mucus expectoration, but in a day or two, a viscid semi-transparent matter is thrown up, which soon becomes stained with blood in a greater or less degree, so as to present a reddish, or rusty color, sometimes inclining to yellow or green, according to the quantity of blood present. As the disease advances these properties of the sputa become more prominent. The tenacity of the expectorated matter is so great that it adheres to the bottom of the vessel

containing it, when this is turned bottom upward; when more copious it runs together and forms a trembling jelly like mass. The viscid and ~~#####~~ rusty colored expectoration, is on the whole, the most certain diagnostic sign of pneumonia, and very often indicates the presence of inflammation, even when the physical signs fail. In some cases nearly pure blood is expectorated; but generally the blood is intimately mixed with the viscid semi-transparent matter. The sputum

is thus easily distinguished from that of bronchitis, which is generally merely streaked with blood. The matter expectorated is believed to come from the minute ramifications of the bronchial tubes, and to be the result of a slow exudation from the inflamed vessels, during which the mixture of its constituents take place. As the disease advances, the secretion increases, but seldom becomes very copious in uncomplicated pneumonia

Fever is generally present, and in many constitutes

— with increased frequency of respiration — the only observable symptoms. Like the dyspnoea, it is sometimes so slight as to escape notice, and at other times it is in the highest degree intense. It is attended with flushed cheeks and headache; the pain is generally located about the brows or forehead, from which the patient may suffer even more than from the pain in the chest. Frequently the pain in the head is the only symptom of which the patient complains for the first two or three days.

Delirium occasionally occurs during an attack of pneumonia, and is a very unfavorable symptom, as it denotes that the due arterialization of the blood is greatly interfered with by the pulmonary affection: It measures as it were, the extent of the damage which has been done in the chest; "and it is a direct evidence that the pectoral mischief is telling, through the circulation of the venous blood, upon the brain." Watson.

The pulse is generally full, strong and slightly incer-

eased in rapidity; but it is not uncommon for it to be very greatly increased in frequency, even from the commencement, in which case it is apt to be smaller and less vigorous; the skin is usually hot and dry. The tongue is very generally moist, and coated with a yellowish-white fur. Diarrhoea and vomiting are occasional symptoms, the former especially in the advanced stage.

The physical signs are of the greatest importance in diagnosing pneumonia. The

disease is sometimes very obscure, the cough and pain are often absent; and fever with headache, and hurried respiration, which are common to many other diseases, are the only notable symptoms. Occasionally even the symptom of the rust colored expectoration is absent. There may either be no expectoration whatever or the sputum is swallowed as in the case of infants. In many cases percussion and auscultation reveals the surest evidence of the nature of the disease

but even these do not always succeed, as when the disease occupies an interior part of the lung, and is everywhere surrounded by healthy tissue.

In the stage of congestion percussion reveals but little evidence of the condition of the lung. By auscultation we gain much more decisive knowledge respecting the condition of the respiratory organs. When we apply the ear to the chest in the early stage of the inflammation, we find that the healthy vesicular murmur

is somewhat obscured by what Dr. Watson calls "minute crepitation." The crepitation is more audible, the nearer the disease is to the surface of the lung. This is the most characteristic sound of pneumonia; and when it is heard it almost positively indicates the existence of inflammation of the pulmonary substance: and the progress of the disease can be pretty correctly made out, by observing the progress of the attendant sound.

When the disease has ac-

vanced into the stage of red hepatization, the crepitation ceases; the respiratory murmur having been destroyed during the first stage, there is either no sound heard, or only that of bronchial respiration. There is also generally dulness on percussion; though this depends in a great degree upon the circumstances of the case; if a portion of permeable lung, even a thin layer should intervene between the diseased parts and the walls of the chest, there will naturally be clear-

ness on percussion, though it will not be quite the healthy sound. If there is no sound lung intervening, we will have a dull flat sound produced by striking upon the chest. In connection with this, we hear in the sound lung, if the whole of the other is affected by the inflammation; or in those parts of the diseased lung that are sound, puerile respiration. In the hepatized stage, besides bronchial respiration, there is generally a stronger vocal resonance, the vibration produced in speaking, being conducted more rea-

ily through the solidified lung. This gives rise to the characteristic sound denominated bronchophony. Another important character of hepatisation, is the greater vibration of the walls of the chest, sensibly felt by placing the hand upon the chest over the diseased part.

If during the stage of congestion, the disease is arrested, the minute crepitation gradually ceases to be heard, and the healthy respiratory murmur is restored. If the disease should extend into the second the second stage

before its progress is arrested, the bronchial respiration and bronchophony gradually disappear, and the crepitation return, but generally somewhat modified, and assumes the character of the subcrepitant rale, in consequence of the more fluid character of the secretion.

So long as the pus remains diffused in the pulmonary substance, the third stage cannot be distinguished by the physical signs. It gives the same flatness on percussion and the same respiratory sounds. If an abscess has formed and

opened into the bronchia a gurgling sound will be heard, if the cavity contains liquid; and pectoriloquy with cavernous respiration, and resonance of the voice, if it is empty.

Vicissitudes of weather are the most frequent causes of pneumonia; sudden exposure to cold when the body is heated is very apt to bring on an attack of the complaint. Violence, poisonous inhalations, excessive use of the voice, and great exertion of any kind which causes an accumulation of blood in the lungs, are

ranked among the causes. Cold is the great predisposing cause; hence the disease is most frequent in the colder seasons. Those occupations which expose the lungs to injury from over exertion, and which render necessary an exposure to the weather, without due protection are also reckoned among the exciting causes.

Pneumonia is more liable to be confounded with bronchitis than with any other disease. It is in cases of bronchitis extending into the minute ramifications of the bronchial tubes

that bears the greatest resemblance to pneumonia. But in bronchitis, the sensations are more those of soreness than acute pain, and usually referred to the anterior and upper part of the chest; the expectoration is merely mixed with blood, not intimately combined, as in pneumonia; neither has it the viscid and tenacious character of the sputum of pneumonia. There is no bronchial respiration, and very seldom any absence of the respiratory murmur in any part of the chest, and but little dull-

ness on percussion. But frequently the two diseases are combined; and when the pneumonia is confined to the center of the lung, it is often very difficult, if not impossible to distinguish between the two.

In cases of inflammation occupying only a part of a single lung, occurring in persons of good constitution, and without any complication there is every reason to hope for a favorable issue; such cases almost always end in recovery, under proper treat-

ment. The disease seems to be very mild between the ages of six and twenty one. "Of forty cases observed by Dr. Gerhard and M. Rufz in the childrens Hospital in Paris, occuring in children from six years old to the age of puberty, only one terminated fatally." It is much more dangerous when the whole of one lung is affected; in double pneumonia the danger is always greatly increased. In delicate persons, and those above fifty, the disease is much more fatal. The fatality

is much greater in hospital than in private practice; chiefly on account of the previously shattered condition of the patients constitution and of the advanced stage at which it is brought into the wards, after previous neglect or bad treatment.

In persons of strong and vigorous constitutions, bleeding is the most potent remedy. The bleeding is not only called for, on account of its direct influence in relieving the inflammation, but with a view also, of lessening the labor of the lungs, and thus

procuring rest for the affected organs. As all the blood must necessarily pass through the lungs after reaching the heart, before it can again be distributed, and as a considerable portion of the lungs when affected by pneumonia, can perform their office but imperfectly, a greater burden necessarily falls upon the unaffected portion, and thus, not only the sound portion of the lung is overtaxed by being compelled to perform the duty of the whole lung, but the number of respirations must be increased,

in proportion. We relieve the lung of a part of this duty, by diminishing the quantity of the circulating fluid, by means of the lancet. After the venesection, the bowels should be evacuated by an active cathartic, but afterwards it is sufficient to keep them open once or twice a day, which may be affected by small doses of Castor oil or Magnesia. The bowels having been fully evacuated, small doses of Tartarized Antimony should be administered, from the twelfth to a quarter of a grain, every one or two

hours. If the skin is hot and dry, the neutral mixture should be administered, if well borne by the stomach. In cases attended with vomiting, the effervescing draught should be substituted for the tartar emetic. After two or three days of such treatment, when the force of the circulation has been sufficiently subdued, a combination of a grain of opium, one of ipecacuanha and two or three of calomel, may be given at night in pill form, the above treatment being continued through the day. Some-

times it is necessary to increase the dose of the anodyne in consequence of the insusceptibility of the system of the patient to its influence. The advantages of this combination of opium, ipecac, and calomel are that it procures rest for the patient, obviates the injurious effects of the cough and directs action to the skin. If the pain remains unabated after the general bleeding, and especially if the physical signs indicate the unchecked progress of inflammation, blood should be taken by cups or leeches

from the chest to an extent corresponding to the strength of the patient. Large emollient cataplasms are also sometimes useful, but require to be used with great caution, lest they render the patient liable to cold by improper exposure of the wet surface.

In the declining stage of the disease, expectorant medicines are very often necessary: the syrups of Squill and Senekka should be combined with a little tartar emetic and one of the salts of Morphia and given in such doses as

the stomach will bear without being nauseated. If the pulse remains very frequent as is sometimes the case, the tincture of digitalis may be added.

In connection with this treatment, a blister may with great advantage be applied to the chest. It should as a general thing be large, at least, not less than six inches by eight. Before this period its application would be improper; as, without unseating the inflammation, it might injuriously increase the fever. Should the fever ris-

ger, the blister may very often be repeated with advantage.

If in the advanced stage the strength fails, it becomes necessary to administer stimulants such as Carbonate of ammonia, in doses of three to ten grains every two or three hours, Wine-Whey and brandy should also be used in connection with a nutritious diet. If there is hectic fever Sulphate of quinia should be used. Gangrenous symptoms should be combatted with chloride of lime and opium, the mineral acids, especially the nitro muriatic.

AN

Inaugural Dissertation

ON

Rheumatism

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

George B. Crawford

of

Baltimore County Maryland

Session of 1867

Rheumatism

Rheumatism from Rheum, a flow is a constitutional affection, a kind of a wandering phlegmasia to which all parts of the system are liable, attended with a peculiar irritation or inflamation. This disease presents a strong individuality in whatever part it may exist. It is different from other varieties of inflamation shown by its shifting, character, and ex in absence of suppuration. This peculiar inflamation first received the name of Rheumatism in Ballonies Treaties published in 1642.
Rheumatism is supposed or considered by some authors to have a tendency only to certain tissues, as the fibrous, muscular, and serous, but I believe, judgeing from its

peculiar character and general description given by such authors as Todd, Armstrong, and others, that any tissue of the body may be affected, and it is divided by the writers into four varieties, Acute, Subacute, Chronic and Nervous.
Acute Rheumatism is a violent local inflamation attended with considerable constitutional disturbance, and usually attacks the large joints.
The Subacute has an inflamation less violent than the acute, with little or no constitutional disturbance and occurs mostly in the muscles and may also attack the joints.
The Chronic form is characterized by long duration and the lowest grade of inflamatory action, and is most apt to fix upon the joints and synovial membranes.
The Nervous variety consists in an irritation directed exclusively to the nervous tissue in which inflamation

and fever are entirely absent.

Symptoms of the Acute form, Acute Rheumatism may come on without any previous febrile symptoms but fever I believe generally and almost invariably attends this form of [illegible] and being present during the whole period and remaining severe most of the time. It is said sometimes to precede the inflamation but this not often happens. The primary symptoms are generally local.

The febrile symptoms that generally precede the acute disease are languor, chilliness succeeded by heat, thirst, anxiety, restlessness and full quick pulse, seldom exceeding 110. in minute. The tongue usually coated white, occasionally red or dry. Seldom nausea or vomiting, the skin though warm is less heated than in other fevers, and is covered with a profuse perspiration of a peculiar, sour, pungent

sickening smell. Notwithstanding this excess of perspiration the skin is extremely hot, and the pulse is in no way influenced by it, nor has it any effect in relieving the inflamation or pain. Being an essential symptom of the affection, therefore it affords no relief. The bowels are generally costive, and the secretions are little diminished with the exception of the urine, which is scanty, high colored, and depositing a brick dust colored sediment of Uric acid. Both the pain and febrile symptoms become more severe towards the evening, and abate considerably in the morning. These exacerbations are accompanied with an increase of pain, consequently they are worse at night but relax somewhat with the fever in the morning. The fever rarely lasts over two or three weeks but the pain and swelling may last as much longer

period. The disease may run its course and very often does so without involving any of the great cavities, or may fix its self upon some internal organ by an invasion of the inflammatory action as the heart, lungs, diaphragm, liver, Stomach, bowels Uterus. When the heart is attacked we may have Endocarditis or Pericarditis, There is acute pain over that organ, with palpitation, difficult breathing, partial fainting, great anxiety, pale, distressed countenance and delirium. When the brain is attacked there is acute pain in the head, intolerance of light, a wild, and anxious expression of the face, heaviness and sometimes delirium. It is said however that delirium may be one of the most prominent symptoms without reason to believe any cerebral inflammation has taken place. When the disease fastens upon the stomach there is pain in its region

with nausea and vomiting &c., and when these internal organs are attacked the disease is liable to terminate fatally, unless prompt and efficient treatment is adopted. Pericarditis like Endocarditis may come on without being denoted by pain or any symptom sensible to the patient. The regions of the heart should therefore be frequently scrutinized by the stethoscope and proper measures be adopted as soon as there is the first indication of murmurs. Endocarditis and Pericarditis may be looked upon as an extension and not as a transfer of the disease as the affections of the joints does rheumatism.
When the disease is about to give way, the decline is indicated by disappearance of the pain, inflamatory action, cease, or if they occur, exhibit a much milder character. The excessive sensibility to impression from without are almost entirely lost, and the febrile symptoms are-

moderated or wholly disappear, some swelling and soreness are apt to remain for considerable time after the disease has passed, and weakness and stiffness of the joints and muscles are frequently left after convalescence and recovery. Sometimes there is more or less local disease left after the fever has gone and the acute degenerates into the chronic form.

Local Symptoms. Excruciating pain may be felt in different parts of the body at the first appearance or after febrile action takes place. The pain shifting from one joint to another with great rapidity, attacking in its progress neighboring parts. Sometimes distant parts in succession, disappearing in one seat after fixing upon another. Sometimes the complaint begins with a feeling of uneasiness. Stiffness is felt in the muscles with a sense of soreness, which is more or less followed by excruciating pain in one or several parts of the body,

particularly in the joints of the toes, ankles, knees, wrists, elbows, and shoulders. The pain shifts about from one joint to another and accompanied with swelling of the parts affected and [illegible] increased to the touch. This tenderness is frequently so great that the patient cannot even bear to have a person to walk across the floor of the chamber. Sometimes the attack is confined to one joint or limb, but more frequently it attacks several limbs and different parts of the body. The pain and swelling of one part may continue or gradually subside, as the disease appears at another. In other instances, the the first symptoms is acute and violent pain, heat and swelling soon come on, and when the pain has been sharp and lancinating it is very commonly moderated after limefaction. Extreme soreness however remains and the slightest movement of the part occasions suffering

on the joints. The disease may be confined to the ligaments or may effect also the synovial membranes, in the former case swelling is firm and elastic, in the latter soft and fluctuating in consequence of the effusion of synovial secretion taken place in the synovial membranes and the cellular tissue continuous with them. The pain is somewhat moderated by the effusion except where there is great distention. The fluid effused is generally absorbed, after convalescence takes place and recovery complete and the joints retain their natural form and motion. But when the fluid is not absorbed the ligaments continue in a thickened state and the motion of the joints are decidedly injured. The swelling is greater in such joints as the ankle, knee, elbow then those that are more protected by muscles as the hip, shoulder, the suffering is very great, the pain being described as tearing, rending, sawing, which

are scarcely ever entirely absent, and are at times almost excruciating.

Subacute Rheumatism

This is a modified form of the acute variety, so limited in extent and pattern with so little constitutional disturbance that it cannot be ranked with the acute, while it is, a notion exclude it from the chronic form, differing in intensity.

Symptoms and course — This variety of Rheumatism is peculiarly liable to relapses, from acute to chronic. In the acute the inflammation is so severe as to give a decided preference of the disease to internal tissues to its own seat. In the chronic the disease is often too almost local and have no disposition to change. In the subacute, the constitutional debility to rheumatic disease is so strong while local affection is so petty that it readily yields to causes which cause the

irritation another direction. This variety is intermediate between the right inflammatory and the purely nervous forms. The attack of subacute rheumatism is severe and depends upon the state of the joints. It is often ended in two or three days and usually lasts a week or two or three weeks or months. It is not easy to be explained but in the majority of cases the disease is confined to one joint at a time. However there was an extension of the disease to several of the articulations simultaneously would give rise to decided fever and thus constitute acute rheumatism. The local symptoms are not however materially different from those described under the preceding variety. The pain however is usually less severe amounting often only to weight, aching or soreness. There is also less redness and heat and the swelling is less tense and elastic. There is sometimes

increase secretion of the synovial fluid, and the of the bursae, and fluctuation may be noticed in the vicinity of the joints especially the knee. It is also true to the muscular form as in the articular. The disease may extend to several muscles or be limited to one. It very frequently however extends to several muscles of the same part, performing the same office. In some instances there is at first a feeling of soreness which gradually increases until it amounts to a dull aching pain which becomes acute when the muscles contract, and then again there is a severe sharp lancinating pain which seizes the muscle when suddenly called into action. The pain is sometimes excruciating so as to make the patient unable to repeat the motion. Any of the external muscles may be affected, and the disease takes its name according to its seat. As the neck, under the name of Wry-neck or Torticollis.

Pleurodynia to [illegible] of the [illegible]. It [illegible] also this occupies muscles situated in the small of the back, [illegible] extending up to [illegible] and [illegible] around towards the abdomen. Sciatica. When the [illegible] is involved which is located sometimes in the muscles, sometimes in the ligaments of the [illegible], and reasons is believe in the neuralgia of the sciatic nerve.

Diagnosis

Suddenness of the attack. The severity of the local symptoms compared to the general. The sharpness of the pain. The utter absence of any tendency to [illegible].

Prognosis

Rarely otherwise than favorable, unless when it seizes upon some vital organs - as the brain, heart, stomach. The greatest danger is probably when the sudden seizure of the muscular structure of the heart, arresting the movements of the heart.

Chronic Form

This form of Rheumatism usually appears as a sequel to the acute or sub-acute attacks and also may appear as an original affection without any previous acute attack. It bears some resemblance to the acute form. The principal difference between the two forms of the affection lies in the less activity of the attack and inflammatory fever and the indefinite duration of the symptoms of the Chronic form. It is sometimes limited to a single part sometimes extends to several and may be fixed or moveable, generally however it is more apt to be fixed firmly in its original seat than either of the other varieties. The effects when the joints are very near the same as in the acute variety. Ligaments become thickened, the form of joints become changed and their motion injured. When the muscles are affected they often or generally waste away. Skin dry, and become shortened.

and, when examined after death, they have been found to contain a yellow translucent gelatinous secretion, in the cellular tissue connecting their fibres. The pains are usually confined to the large joints. Most frequently the hips, loins, knees, and shoulders. Though every joint is liable to suffer the pain may be confined to one particular part or may shift from one joint to another with a slight degree of inflammation. The pain is generally worse at night, and worse in moist than in dry weather. Some persons are hardly ever free from pain, while others suffer only on the occasion of violent exertion or from improper exposure. The joints are usually swollen but not to that extent as in the acute form, and the skin is not reddened with the redness of the inflammatory variety, but is pale-cold and stiff, and cannot be easily be made to sweat. When the patient

Chronic Form

remains at rest for a short time he will experience pain, and stiffness in the affected part on attempting to move it. But on exercising until the body becomes warm, both pain and stiffness disappears. The pulse is generally quick and tense - more particularly towards night. The appetite is more or less impaired. Urine variable bowels irregular, with a tendency to coldness of hands and feet [illegible] of the limbs, and not unfrequently a partial impotency. When chronic rheumatism is permitted to progress without attending a permanent cure. It causes organic disease of tendones, permanent stiffness of the joints, with a wasting and hardening of the muscular structure about the parts with considerable deformity. There is generally a complete absence of fever in this form of rheumatism. [illegible] disorganization of the [illegible] has taken place. In obstinate and very old cases there is often stiffness or immobility

Chronic Form

of the joints arising from contraction or thickening of the ligaments. It is a very tenacious and obstinate disease to cure, on account of the inattention bestowed upon it during the absence of actual suffering. But when early and properly attended to it is as readily cured as most Maladies.

Nervous Rheumatism

This form of rheumatism evincing itself by pain or other disordered sensation, and by irregularities of the motive power. It may affect any portion of the body or organ. The disorders of sensation and function falling under this head are peculiarly similar to nervous Gout, and for to day, whether it is nervous Gout or nervous Rheumatism is to notice which of these diseases it is apt to be associated with. The rheumatic irritation may assume the form

Nervous Rheumatism

of neuralgia, pain in any part of the body.
Vertigo. Dizziness. Headache. Tinnitus aurium, perverted vision &c, when it affects the brain. When affect the respiratory apparatus. hurried or irregular breathing and even violent dyspnoea. Palpitation. Oppression and great precordial distress when the heart is affected. Dyspeptic symptoms nausea or vomiting, spasms &c when the stomach is affected. Colicky pains when the bowels are affected.

Causes— The exciting causes of this variety of rheumatism are the same as of the other. A predominance of the nervous temperament. Sedentary habits. Whatever tends to depress the powers of the system at large may be considered as favoring the production of nervous rheumatism.

Treatment of Nervous Rheumatism

The practitioner must be guided in his treatment

Treatment of Nervous Form.

by the symptoms, arising and make his applications accordingly. According to Woods Practice, one universal rule in these cases is, Whenever the faintest disposition is shown by nature to give an external direction to the disease, a judicious use of alterative medicines, such as Colchicum, Guaicum, Aconite, Veratria, Arnica and Sulph Iodide.

Anemic condition of the system, preparation of simple bitters nutricious diet. When the disease takes on the intermittent character. Sulphate of Quinine should be used freely, and in the neuralgic forms it often becomes absolutely necessary to have recourse to anodynes.

Causes of Rheumatism

Acute Rheumatism is generally said to be produced by an exposure to cold or damp. It is

Causes of Rheumatism

true these may be the only known exciting causes. But these exposures are frequently made to the full extent without a subsequent attack of the disease. And so the disease may occur without any exposure of this kind whatever. As Prof Wood says there must be a peculiar state of the system, predisposing to this form of disease — a rheumatic diathesis. What this rheumatic diathesis consists in has not been discovered. It may depend upon an excess of lactic acid. Upon the approach of damp weather the unhealthy muscles exhaust, and by pressing upon their accompanied nerves, produce more or less pain and, as soon as clear and pleasant weather approaches the muscles become reduced to their original size. The pressure upon the nerves is removed and the patient is free from pain and comparatively well. The pain is generally worse — as the disease itself

But is only a symptom of the disease. The period of life at which the disease is most prevalent is between fifteen and thirty five or forty years of age. The most powerful predisposing cause of the disease is a previous attack of it. And a predisposition to the disease is often inherited.

Diagnosis

It presents many resemblances to Gout which is the only disease it is liable to be confounded with. And may be readily distinguished by the following points. Rheumatism affects chiefly the young and middle ages, and the poor. The Gout the Elderly and the wealthy. Rheumatism [illegible] the large joints. Gout prefers the smaller, as the feet, hands. Gout is attended with more obvious disorder of the digestive organs. The pain is of a more burning character and the swelling greater and more rapidly red.

4) Prognosis — Very seldom fatal in adults. Children under fourteen years of age extremely dangerous in consequence of its tendency to give rise to a condition of the heart. In uncomplicated cases it may almost always be conducted to a favorable issue.

Treatment

Acute Rheumatism. The principal object to be kept in view, in the treatment of this form. is first to limit the dissemination of the disease. Second to moderate inflammation when it occurs. Third to prevent relapse. To answer the first indication, when the pulse is full tense, and inflammation severe, bleeding should be employed, with a freedom proportional to the vigour of the patient and resistance of the pulse. But should be employed with great caution in consequence of making the heart the centre of irritation which calls

the disease from its external local seat, and fix itself upon this vital organ, which may result fatally. Bleeding is well born; but cannot cure cure the disease; Should never bleed for the pain alone. The pulse and obvious amount of local disease as manifested by heat, swelling, inflammation and redness are much surer guides than the degree of pain. Active purging is always proper. Purgatives should always be active but not drastic. The bowels should be kept steadily open, with some of the saline cathartics, as Senna with Sulphate Magnesia. Sulphate Magnesia with wine of Chrlchicum. Salts. Bitartrate Potassa. Are tartar or cream of the lines. Calomel alone, or in combination with some of the vegetable cathartics is proper and suitable to begin with. The purgative should be repeated every other day. [illegible] the first or second occasion it will be sufficient to employ the

sulphate of Magnesia. Should the bowels become irritable the purgation should be suspended. Refrigerants, Diaphoretics are indicated. Dover's Powder in full dose, at bed time. Tartar Emetic, with Nitre forms an excellent combination, as for instance. Take Tartar Emetic ½ grain. Nitre five grains. Mix given dissolved in water every two hours. [illegible] If this offends the stomach Citrate of Potassa, in the form of the neutral mixture or effervescing draught may be used. If stomach is acid. Alkalies may be used, but if alkaline the acid may be used. Lemon juice, [illegible] reputation. The object of the diaphoresis is not merely to induce perspiration, but to sustain a moderate sedative impression over or upon the circulation. Opiates et Opii should be given at bed time to relieve pain and procure sleep. If the disease does not yield to this treatment by the second week, resort to Calomel, Tartar Emetic and Antimony as alteratives and may be suspended as soon as

Treatment

gums becomes tender, Copious salivation not desirable.

If the patient is, in any way disposed to move about Colchicum and morphia will be found of great advantage. If an adynamic condition of the system comes on, which is indicated by perspiration during sleep, Sulphate of Quinine is an admirable remedy given in doses of about one to two grains every hour. More than this is seldom required, large doses are dangerous as causing a tendency towards the heart. Should there be danger from affection of the heart, prompt and energetic treatment is strongly called for. Bleeding general & local, Blisters, the Mercurial course should be commenced at once, leeches should be applied between the shoulders. Blister 8 by 10 – applied over the region of the heart. If the brain is involved [illegible] is the same. Efforts should be made also in cases of retrocession to invite the disease back to its original seat. A hot pediluvium is very good.

Treatment

Local Treatment. In acute rheumatism local treatment is disregarded and attended with great danger. Upon the whole the less is done in this way is better in consequence of increasing the risk of repelling it from the joints to some internal organ. It may be kept in to cover up the parts with carded cotton flannel. If pain very severe a mild hop poltice or a mild anodyne liniment may be applied. Should the spinal column be found tender with rheumatism in lower extremities cupes should be applied to the tender spot. When the complaint has given away. The fever subside and if the parts remain swollen and painful an anodyne and rubefacient lotions may be found useful. such Camphor Liniment &c. But still more advanced period when the disease seems to be peculiarly adhesive to one part or a few parts and threaten to form chronic I would blister the parts, and if any stiffness or swelling which may remain. May be cure by the following application

Treatment

Dissolve Muriate of Amonia two drams in one fluid [illegible] of water "distilled" add tinct Hemlock one ounce. the parts may be bathed with this [illegible] times a day.

The compound plaster of Belladonna is very good

Diet — Hygiene &c

During the acute state the patient should be in a quiet and recumbent position. the apartment [illegible] be occupied should be maintained at a moderate & uniform temperature.

Diet should be very light — as Barley water toast water. when the pains and inflamatory symptoms have subsided [illegible] be more nutritious. all fats - acids and every thing will cause acidity of the stomach or flatulence and all stimulants especially liquors of all kinds [illegible] positively be avoided. the surface of the body may be rubbed once or twice a day with a coarse [illegible] with a fine [illegible] friction so as to cause an agreeable glow of heat. Moderate exercise both within doors and out in the open air. being extremely careful not to fatigue himself and

Diet & Hygiene &c

to avoid all excesses which may excite a new attack. The patient should wear flannel or cotton, and avoid linnen next to the surface of the body.

Gentlemen

In submitting the foregoing pages to you penetrating and scrutinizing minds, would not be doing justice to my own feeling, without, not merely giving the light reflected from my respective Chairs on the unexplored road of Medical Science in giving me a safe starting point, and making that intelligible and clear, which was enveloped in obscurity and mistery. So far I cannot reveal anything new to the progressive science, but only unfold to you again that which was unravelled to me.

I remain Respectfully

Yours

Geo. P. Crawford

1867

An Essay
on
Pneumonia

Respectfully Submitted
To the Honorable
The Regents, Provost and
Faculty of the
University of Maryland
by
Gustavus, A. Wagner.
Baltimore.
Maryland

Pneumonia

The word means inflammation of the substance or parenchyma of the lungs. The parenchyma constitute the air-cells or vesicles together with the bronchioles or terminal bronchial branches. The air-cells and bronchioles are lined by a membrane, which differs from the mucous membrane lining the bronchial tubes, by its tenuity, by the absence of mucous follicles, and by a change of epithelium from the cylindrical and ciliated to the squamous or tessellated. The air-cells and bronchioles constitute the lobules, and these united by means of areolar tissue constitute the lobes, into which

the lungs are divided. The inflammation in pneumonia affects the membrane lining the air-cells and bronchioles. When, pneumonia does not depend on an existing pulmonary disease, it usually affects, at least, an entire lobe; and this is called lobar pneumonia. When, it depends on a pulmonary disease, it may be more or less limited. When, it is limited to a portion of a lobe, it is called circumscribed pneumonia. The inflammation is found more in an acute form, than in a chronic form.

Anatomical Characters.

The first change resulting from acute inflammation of the lung is, an abnormal

accumulation of blood, or hyperaemia, due to active congestion or engorgement. The inflamed portion of the lung is heavier than in its healthy state; on section, the cut surfaces have a dark appearance, and blood flows freely, accompanied by a frothy serous liquid. In this condition the air-cells still contain air. Exudation soon follows. The blood deposits a coagulating material in the air-cells. The cells fill up and are distended with the exuded matter. Air is now wanting in the cells. The lung is solidified, having the appearance of the liver, which condition is called hepatization. In this condition the

lung contains very little blood, and when cut, the surfaces present a granular appearance. The lung is softer, breaking down under the pressure of the finger more readily than in its healthy state. Its weight is greatly increased. A single lobe solidified gains from one to two pounds in weight, and a entire lung solidified may aquire an additional weight of four pounds. This increase in weight is due to the amount of solid matter diposited in the lung by the blood. From the want of air, portions of the solidified lung sinks when thrown in water. The solidified lobe or lobes do not collapse, when the chest is opened. If the progress of the disease

is favorable, the exudation is removed by absorption. The absorption of the exudation varies greatly in different subjects; in some it is absorbed much more rapidly, than in others. If it has been absorbed entirely, the air cells will be found to have sustained no injury. The pulse will be restored to its natural and the recovery of the part will be found complete.
If the progress of the disease is unfavorable, suppuration sets in, and the affected lobe or lobes are infiltrated with pus. This is called purulent infiltration. The lung has a grayish appearance, and when cut pus flows freely from the surfaces. The lung is much softened,

and breaks down on slight pressure. Sometimes the pus collects and forms pulmonary abscesses. Gangrene of the lung sometimes takes place, but this, as well as abscess occurs very rarely. Pleurisy is in most cases developed coincidently with pneumonia. It is wanting in comparatively few cases of pneumonia. It varies much in regard to its severity in different cases. The exudation of lymph varies also in amount in different cases. Liquid effusion into the pleural cavity is rarely met with; the pleurisy is mostly circumscribed and dry. The coexistence of pleurisy & pneumonia is called peripneumonia and pleuropneumonia

These terms are often applied to cases in which pleurisy is very prominent and attended with liquid effusion.
Bronchitis often exists with pneumonia affecting the bronchial tubes within the affected lobe or lobes. Bronchitis affecting the bronchial tubes of both lungs is sometimes present with pneumonia. When these two diseases are combined, it does not follow that the one tends to develope the other. In a majority of cases pneumonia attacks the lower lobe, and the lower lobe of the right lung, oftener than the lower lobe of the left lung. It sometimes attacks primarily an upper lobe, and in these cases the disease is generally more severe.

The disease rarely attacks two lobes at the same time, but it invades, sometimes a second or a third lobe. The disease does not extend from one lobe to another, but when a new lobe is affected, it is the seat of a new invasion. The lobes of one lung may be successively invaded, or a single lobe on both sides, or an entire lung being first affected, a lobe of the other lung may be attacked. In the latter two cases the pneumonia is said to be double. The inflammation extends at least over an entire lobe, in the great majority of cases. There are some exceptions to this rule. Doctor Flint says, I have known some instances in which the physical signs clearly showed the occurrence

of inflammation extending over a limited area, without any evidence of circumscribed pneumonia being a complication of any other pulmonary disease. In a lobe invaded secondarily, that is, one lobe being already affected, the inflammation is sometimes found after death to have extended over a portion only of the lobe. This fact I have repeatedly noted, but perhaps if the life of the patients had been prolonged, the whole of the lobe would have been affected. The whole of a lobe first invaded is not affected at once. The inflammation begins at a certain point, and then spreads from lobules to lobules until the whole lobe is involved. The point of departure may be at either the upper or

the lower extremity of the lobe, and at either the superficies or the centre of the lobe. The diffusion of the inflammation over the lobe goes on more or less rapidly. In some cases it takes but a few hours, whilst in others it takes several days. The progress of the solidification from the exudation may be determined very accurately by means of physical signs. Pneumonia very rarely ends in the first stage. Solidification almost always takes place, and when the pneumonia is not secondary to another pulmonary disease, it nearly always extends over the lobe or lobes invaded.

Clinical History.

The first stage occupies the time during which

the affected lobe is in the state of active congestion or engorgement. This is called the stage of engorgement. The second stage embraces the period, during which the affected lobe, or a greater part of it, has become solidified by the inflammatory exudation. This is called the stage of solidification or hepatization. The third stage is one, in which the affected lobe is in one of two conditions. If the disease pursue a favorable course, the third stage begins when it is evident that absorption of the exuded matter is going on, and convalescence takes place during this stage. This is called the stage of resolution. If the disease pursue an unfavorable course the third stage is one of suppuration or

purulent infiltration. This is called the suppurative or purulent stage. If this stage occurs, it generally ends fatally. The duration of each of these stages varies in different cases. The stage of engorgement may occupy only a few hours. The stage of solidification generally occupies from twenty-four to forty-eight hours. In some cases it embraces a shorter and in others a longer period of time. The stage of resolution is still more variable than the first and second stages. The solidifying deposit is very rarely removed in less than eight or ten days, and in some cases three ~~and~~ or four weeks and sometimes a longer time is required, before the air-cells are restored to their normal condition.

If the disease assumes the purulent form, death generally occurs within a few days.

Symptoms.

In the great majority of cases, acute pneumonia commences with a well pronounced chill, soon followed by fever; coincident with, or soon after more or less pain is felt in the side, back or breast. In the majority of cases the disease is ushered in very suddenly with but few premonitory symptoms. If the pain is acute and lancinating it mostly depends on a complication of pleurisy. Cough is present or soon follows the invasion. It is sometimes wanting.

When the cough is a prominent symptom, the pain is more severe. The cough is often accompanied by expectoration. In the first stage of pneumonia the sputa is scanty, transparent and viscid; but in the second stage it is semi-transparent, adhesive, and rust coloured. The rusty appearance is due to the blood which has become mixed with the mucus in its passage from the smaller to the larger bronchial tubes. The sputa of a well marked case of pneumonia, when collected in a vessell, unite into one jelly-like and trembling mass; and adhere to the sides and bottom of the vessell with such tenacity, that it may be inverted

without they being detached. If it contains an abundance of blood, and if the blood is of a dark color it is called the prune-juice expectoration. The invasion commences with a pain in the head, side, back or breast, loss of appetite, thirst, prostration heat of skin etc. The pulse is more or less full and hard, ranging from 80 to 120 beats in a minute. The respirations are increased in frequency. This may depend on the pleuritic pain or on the interruption of the function of haematosis in the part of lung affected. During the stage of hepatization, the symptoms change somewhat. The pain diminishes or ceases entirely. The cough and expectoration continue, but the

cough is not so hard and painful, and the expectoration is effected more easily. The sputa becomes opaque, abundant, less adhesive, and less rusty in its appearance. It is supplied chiefly by the bronchial tubes within the affected portion of lung, and is abundant in proportion as the bronchial mucous membrane is involved in the inflammation. The febrile movement is diminished in intensity. The respirations are still increased in frequency on account of the solidified part of lung taking no part in the respiration. If the disease invades another lobe the febrile movement increases, the respirations increase in frequency, the breathing becomes laborious,

and the alae nasi dilate.

Diagnosis.

Lente pneumonia, in some cases is accompanied by symptoms, which are highly distinctive. If a patient be seized with a chill, followed by febrile movement, together with a pleuritic stich, referred to a circumscribed space near the nipple, and the characteristic rusty expectoration occur, the diagnosis is readily made without the aid of physical signs. But these symptoms are by no means constantly present. The disease is not unfrequently entirely latent as regards diagnostic symptoms, and is often overlooked by those who do not employ physical exploration. Even if its existence

be revealed by symptoms, without signs, the situation and extent of the affection can only be ascertained by the latter means. In the first stage, the signs on which the diagnosis is to be based, are slight and moderate dullness on percussion and the crepitant rale; the latter is persistant and well marked, is almost pathognomonic. But the crepitant rale is not uniformly present. In its absence a positive diagnosis may require some delay, until a sufficient number of lobules are solidified to give rise to an appreciable modification of the respiratory murmur. In most cases if the disease be observed from the

beginning, the signs of the second stage are soon declared. In many cases the disease has already advanced to this stage when the patient is first examined. When the solidification has become sufficient in degree, and has extended sufficiently over the affected to furnish the signs of that condition, the diagnosis if have not been already made is rendered clear by the presence of the signs. Bronchial respiration, bronchophony and whispering bronchophony are the signs denoting solidification. Dullness on percussion is now marked, amounting perhaps nearly or quite to flatness. This dullness or flatness extends over a space corresponding to that

occupied by the solidified lobe. The commencement of resolution and its progress from day to day are shown by modification of the signs denoting solidification. The bronchial respiration gives place to the broncho-vesicular, and the latter progressively approaches more and more to the normal vesicular, into which it becomes finally merged, when the resolution is completed. The characters of bronchophony are gradually lost. Dullness on percussion becomes less and less marked. If the disease pass into the stage of suppuration, the dullness or flatness on percussion continues, and the moist

bronchial rales, due to pus in the air-tubes are prominent.
The auscultatory signs of solidification continue, but are less marked. If abscess of the lung take place and the patients life be prolonged until a discharge of the pus into the bronchial tubes occurs, cavernous respiration may become well marked.

Prognosis.

The prognosis of acute pneumonia will depend on the extent of lung involved, the disease with which it may be connected as an intercurrent affection, its complications, the previous constitution of the patient etc. Occurring as a primary disease limited to a lower lobe,

remaining uncomplicated and the person affected having a fair constitution the intrinsic tendency is to recovery. Even if more than one lobe be involved, provided the disease be primary and uncomplicated, a favorable termination may reasonably be expected in a subject not enfeebled by age or other causes. The gravity and danger then, in cases of this disease, proceed not so much from the disease as from coexisting affections and other incidental circumstances. Developed in the course of continued fever, measles, or other diseases, it may lead to fatal termination. In aged and feeble persons it may end fatally without any coexisting

disease, especially if more than a single lobe be involved. Occurring in persons affected with organic heart disease, it is likely to prove a serious affection. The complications which are most apt to render it fatal are pericarditis, intermittent fever, and delirium tremens. As regards anatomical changes pertaining to the lungs, gangrene, abscess and the suppurative stage of the disease render the prognosis extremely unfavorable. Symptoms which are unfavorable as prognostics are the following. Frequency and fullness of the pulse, great frequency and labor of respiration. Lividity of the prolabia and face, an abundant purulent or muco-purulent expectoration.

Bloody dark colored sputa commonly known as the prune-juice expectoration, active violent delerium. Low muttering delerium, with prostration and subsultus tendinum, constituting the typhoid state. In the majority of fatal cases of acute pneumonia death takes place from asthenia in combination with apnoea.

Treatment.

The different stages of acute pneumonia furnishing different therapeutical indications, the treatment of each stage is to be considered separately.

The question whether the disease may be arrested relates to the first stage. Measures which have heretofore been

considered as abortive and which are still perhaps so considered by some, are blood letting, cathartics and other remedies entering into the so-called antiphlogistic method of Treatment. Experience has abundantly shown that these measures are not to be relied upon for the arrest of this, more than other inflammations. Even admitting that they sometimes succeed, the probability of success is so small as not to warrant their employment under circumstances, which will be likely to render operation hurtful if they do not prove successful. The objects of Treatment then, in the first stage are, to diminish the intensity of the

inflammation, to relieve symptoms, and place the system in a condition to tolerate the disease. As regards blood letting, its employment is to be regulated by the general considerations. It is admissible in certain cases as a palliative and perhaps to some extent a curative measure, in view of the promptness of its effects. The circumstances which warrant its employment are; high febrile movement, the pulse denoting increased power of the hearts action, and the condition of plethora, or at least a robust constitution. It is contraindicated wherever the febril movement is not marked, the denoting activity without

power, the patient anaemic or with a feeble constitution. In most cases in which it would be admissible, provided the same ends could be secured by other means, the latter are to be preferred. They consist of depletion by saline purgatives and sedative remedies as veratrum viridi etc. These remedies are not called for if the symptoms are not urgent and are contraindicated by feebleness or a tendency to depression. Opium may be given with propriety and advantage in the first stage in doses sufficient to relieve pain, and tranquilize the system. Cups, sinapisms or stimulating liniments may be employed, followed by warm fomentations, which

must be changed as soon as the temperature becomes lower. In the majority of cases a saline purgative followed by some form of opium, the latter continued at intervals, together with soothing applications to the chest, will meet the indications pertaining to the first stage. The treatment in the second stage has reference to the promotion of resolution, palliatives of symptoms and supporting the powers of the system. Bloodletting or purgatives are not indicated in this stage. Iodine in the shape of tincture applied externally answers well in the second stage, repeated at intervals in order to keep up a certain amount of counterirritation.

Blisters are not advisable, on account of the general disturbance which they occasion, and their interference with physical examinations of the chest. If pain exist, the best applications are, either warm fomentations of linseed, or the application of turpentine, or what is used frequently in Hospitals, the oiled muslin jacket which in fact answers every purpose of poultice as it retains the moisture of the body and prevents too rapid evaporation of the perspiration. Opium is a most valuable remedy in the second as in the first stage; it is indicated not only by the continuance of pain, but by vigilance, restlessness and symptoms denoting

constitutional disturbance. I have seen whilst connected with the U. S. Hospitals, that a marked difference in the reduction of the pulse and respirations with refreshing sleep and a condition of comfort to follow a full dose of opium. This remedy has the advantage of not doing harm if it fail to do the good we expect from it. Remedies to promote expectoration, as a rule, are not indicated. The use of remedies of this class is based on the erroneous idea that the matter of exudation is expectorated. Clinical observation shows that the removal of this matter may go on ~~without~~ with great rapidity without any expectoration.

The expectoration in the second stage is due to bronchitis usually limited to the affected lobe or lobules. Sedative remedies, such as tartar emetic in small doses, and the veratrum viride are admissible in this stage, if there be considerable high febrile movement, without a tendency to asthenia. They should be cautiously given so as not to incur risk of constitutional disturbance or depression. To support the powers of life is the leading general indication in the second stage. Resolution will be sure to begin and continue if the life of the patient be sufficiently prolonged. The danger is generally not from the amount of persistence of the solidification of lung, but from failure of the vital powers before the resolution takes place. The supporting

treatment embraces tonic remedies, alcoholic stimulants and nutritious diet. Of tonic remedies quinia is to be preferred. Alcoholic stimulants form a very important part of the supporting treatment in the disease as in all other diseases, whenever the great object is to keep the patient alive until the disease has reached the end of its career and advanced into the stage of resolution. As regards the circumstances under which the use of alcoholic stimulants is to be commenced, they are always indicated so soon as evidence appears of any tendency to failure of the powers of life. And of this the action of the heart is the best criterion. Feebleness, great frequency, and a pulse

vibratory or thrilling but compressible denoting increased activity but diminished power of the ventricular contraction; these are the characters which indicate supporting measures, of which alcoholic stimulants are an essential part. Given at first in small and moderate doses and increased as occasion may require. The habits of the patients, as regards the habitual use of alcoholic drinks, are of course to be taken into account. In cases of pneumonia associated with intermittent fever quinia should be given promptly and in efficient doses. Cases of pneumonia complicated with delerium tremens call for the pretty free use

of opium together with alcoholic stimulants and a nutritious diet. When convalescence is established there is little or no danger of a renewed attack. There is therefore no need of extreme precautions in order to prevent a liability to relapse. Experience has shown that a solid, substantial diet may be entered upon as soon as the patient is fairly on the road to recovery, and that the recovery is more rapid, than if the appetite be too much restrained. As a general rule ordinary, wholesome, digestible articles of food may be allowed, when they are desired by the patient. Permitting or encouraging the patient to sit up will be found not to

retard recovery; but on the other hand apparently to hasten the progress of resolution. Early going out of doors is not objectionable. If the disease proceed to suppuration, purulent matter being either infiltrated or forming abscesses, the prognosis is extremely unfavorable, but perseverence in the supporting treatment is sometimes successful.

An
Inaugural Dissertation on the
Development of
Bilious Remittent Fever
Submitted to the
Examination of the
Provost Regents and Faculty of
Physic of the
University of Maryland
for the degree
Doctor of Medicine
By
Samuel S Lawson
of
Maryland

Remittent or Bilious fevers

These fevers are Common in the United States and prevail in the middle part of Summer and autumn. The other Complaints known by the name Common continued or Typhoid fever &c. Which are most Common in cold weather. These are epidemical or internal and visiting bodies, but they may occur at any period of the year but not frequently, exist at the same time and as they often bear no inconsiderable resemblance to each other they require a very different treatment.

Remittent or bilious fevers are common in most parts of the United States, extending to Lower Lakes and the Gulf of Mexico.

and is more frequent in the Middle and Southern Sections than in the North. In some cases, in England it is almost unknown it is rare in the Mountainous and hilly districts, or overcrowding except when there are large Streams or Standing pools, which are in Sandy Bottoms and with fine Crusts, and in the middle of Cities. The situations in which the disease is most frequent are the valleys of Streams the banks of lakes or ponds, and the rich bottoms of the Western States. It is a much more serious disease in the Southern and Southwestern than in the Middle or Northern States. It is not

Remittent or bilious fever may occur
in all countries throughout the Eastern
East and South. In the Indian
we received numerous names which are
used to distinguish it. It is Remittent
fever in the Ganges, marsh or tide
Remittent fever. Intermittent fever
in which it is difficult to detect
any decided remission. We endeavour
to remove some of the names which
have been given to this disease. Under
over the Bengal fever Lake fever
&c, has been applied to the
fevers which they found out from
other and the term Remittent
has been stated that miasmatic
Remittent fever is usually to

Some diseases as the intermittent fever have so well defined each other, that it may be impossible in some cases to decide to which of them it belongs. In the intermittent, there is some degree of marked pattern between the paroxysms, and in some other, even better, it is not always possible to determine whether the marked pattern as it exists does or does not amount to one. If there is no rest it is intermittent, if there is remittent the paroxysms come at regular intervals and consist of the cold, hot, and sweating stages. In some paroxysms one or two of these stages may be wanting.

This fever sometimes raises and lowers
all of the symptoms from one
to the same. Remittent and
intermittent fevers have the same
cause, the malarious miasm every day
the tertian every third day it is not
uncommon the quartan is very rare.
This is doubtful tertian the paroxysms
may occur in the morning or evening
those of the evening are lighter
those of the morning have headache
or. Remittent fever may be
considered as the same as tertian but
the paroxysms are less intense
but are of longer duration
lasting the whole day.
Quotidian fever is the one in which

This grades may be estimated, first as
towards its violence and secondly, the
many or system which attend it as
regards violence it may be of all grades
from the mildest form which scarcely
demands indulgence to the fearful
which demands immediate relief.
The many or system may differ
and in it differs the blood
may be hot and the circulation
and as it may be so
with the blood vessels exhausted by
disease the blood may become congested
and take the form of
Disorders. War or two days
more before the fever commences
the patient is a dull heated

Disposition complains of uneasiness at the epigastrium depending a slight pain in the head, and soreness in different parts of the body, the tongue is very foul and the pulse and the surface exhibited and the complexion yellow, During this hard the patient is going about though languid, the disease usually commences with a chill, the face is pale the lips purplish the pulse depressed and irregular there is nausea and vomiting, thirst and pain in the loins the duration of the chill varies from a few minutes to an hour or more it does not last as long as in intermittent and the patient is liable to have

relation by changing his position
or placing himself in contact with
the wall or other objects. The
patient is usually quiet but
she is addicted to vomiting and
the pulse increased from 90 to 120
in the minute. The tongue is
usually very much coated at this
period there is a complete loss of sleep the
face is flushed the eyes suffused
there is sometimes delirium, the patient
is restless and wakeful. This condition
continues for a considerable time
after which they begin to recover
the patient gets weak and when
she awakes seems to be much improved
the thirst and nausea

have gastric catarrh as is natural the skin dry in natural cases the tongue is moist throughout the disease but in the higher grades it becomes dry and cracked and becomes moist in the remission. Sometimes the patient has soreness of the back part of the tongue or fauces which causes hawking with discharges of a glairy mucous in the majority of cases there is more or less tenderness upon pressure in the epigastrium there is a dull or weight felt in the region of the stomach. This tenderness and pain in the epigastrium is not experienced before the third

or fourth day and increases as the disease progresses. Nausea and vomiting are frequent attendants upon this form fever; these symptoms are most troublesome when the disease is highest the matter ejected is a yellowish, greenish, bluish or brownish colour and with an acrid taste it is often difficult for the stomach to retain medicine or drinks. Many mild cases run their course without these symptoms the bowels are constipated in the early stages purgatives act sometimes with great difficulty. The stools are disordered, dark colored and

discoloured with some shades of yellow, green, or black. The urine is dark and of a yellowish brown or reddish and bubble brown colour one of the most striking characteristics of the disease, and present in all cases, is a yellowish hue of the skin and of the white of the eye, this makes its appearance about the third or fifth day of the disease, in some, and in others it is of a dark or bronzed hue. Such are some of the symptoms which attend bilious fever. The disease retains a distinct character it generally runs on when not interrupted in two

of the week or ten more severe
fever exists it chronicles the continued
fever. At the end of from seven
to fifteen days the fever begins to
decline, or ends fatally, or takes on
a new character. The first signs
of a favourable change are a steady
pulse, moisture of the tongue and
a softer more moistened cooler state
of the skin and the disease goes
off with a profuse perspiration.
This is preceded by the smell the
diarrhoea which takes the place
of the perspiration is usually copious
and copious tar like discharges
sometimes occur towards the close
of severe bilious cases this is considered

a drowsy state occasionally, and
on the 15th convalescent this
period he is also regarded as
dangerous in order managed, and
as the disease progresses becomes
more exacerbated and doubtful, and
more severe it sometimes comes
entirely at the wish, some hours
before death, coldness in the hands
and feet gradually extends the
system, the skin assumes a dusky
or purplish hue, the extremities
are covered with a clammy sweat
the tongue dark brown, clammy
or dry and cracked, hiccough comes
on, and is with eructation of
dark water from the stomach

Black liquid matter, bland or reddish brown like the washings of flesh are discharged from the bowels the urine is dark brown and scanty or suppressed. The features sunken the eyes become dull delirium stupor, or coma takes place the patient passes usually without consciousness into the dying state, death and this circumstances generally occurs between the seventh and fourteenth days of the disease the pulse may rise to 140 or more sordes collect about the teeth tongue and lips stupor or delirium picking at the bed clothes slipping down in

the end so the patient sinks tired
in a stupor. Sometimes in
his bed and sinks exhausted
When the fever takes this form it
may run on for five or six weeks
and may end favourably.
Modification, sometimes the
disease starts at once with
alarming violence, after a
slight chill the patient may
be seized with pains in the
head back and limbs suffering
in the epigastrium and vomiting
of bilious matter, persons exposed
to such effects are seized with
vertigo, delirium, at the very
outset the stomach and liver

[illegible] attended by [illegible]
[illegible] its [illegible] towards the
[illegible] Cholera most [illegible]
[illegible] vicious form is known in
this country by the name of
congestive fever. It is rare that
[illegible] bilious fever
without some degree of inflammatory
burning pain in the epigastrium
tenderness on pressure, vomiting,
inflammation of the bowels
this occurs most in advanced
stages. Dysentary in some
seasons is associated with remittent
fever. There is pain in the
stomach; hypochondrium. The
[illegible] is swollen. There is

Such as percussion on the side sometimes done. Rennie pains me all this is owing to the Spinal marrow hemorhages

Sometimes coma

Convulsions in the mild cases is rapid and remarkable but in severe cases there is considerable lying to the system. Cutaneous Characters, There are numerous eruptions presenting, signs of inflammation in this disease the mucous membrane of the bowels is inflamed, Brunners glands are sometimes inflamed and the track of the bowels has been noticed to be inflamed ulcerated or downs near the

commencement of the disease it
coagulates without the co-agulation
being advanced. Stages it becomes
only a cause of bilious remittent
is the miasma which proceeds
from marshes but is considered
by some to favour the disease
Cleanliness and ventilation is
of great importance in bilious
remittent. Our old wives decoctions
regulators and pill are
injurious and may be the cause
of bringing on the disease
Females are less liable to this
disease than the males. In west of
Africa it is said to be unknown
which accounts to the race

Preventing the rigi
where this fever abounds may be
avoided in the dead of winter
Autumn. The opinion which
covered with the phenomena of
bilious fever to gastric derange
ment to combined it no
longer meets with supporters.
Another view of intermittent
fever is that it results from inflammation
of one or more of the organs
especially the stomach, liver,
or brain. Cases of the kind
do occasionally occur that
are intermittent; sometimes
assumes the appearance of a
remittent. There are varieties

diseases making their appearance
several days after the commencement
of the attack these organs then
become more or less inflamed
Diagnosis Little needs said
upon this subject here
Bilious remittent fever may
be taken for dysentery and
vice versa when it but is the
bilious remittent
never first. The regular
paroxysmal character, and
disposition to return and
and intermittent fever
second the epigastric
uneasiness and irritability
of the stomach third the

usual constant pain in the head, fourth, the excessive bilious vomiting and purging of bile, the yellow shrivelled eyes and the immediate urine. The season of the year the place where the disease may have been contracted and the exposure of the patient, the length of time since the exposure when these forms occur it is Bilious remittent. Prognosis, This is generally favourable, the bilious fevers always end in recovery unless badly managed. The severest form

ital yield to prompt treatment this disease becomes most fearful when neglected or mismanaged. Single cases are less dangerous than those complicated with inflammation heat of the skin headache and frequency of pulse this is considered unfavorable but does not indicate great danger. Among the alarming and often fatal cases are found pulse rapidness of the skin and delirium or coma and expectation of black matter hemorrhage from the bowels involuntary evacuations and suppression of the urine.

treatment it does not [illegible]
fals, we see the patient in the
end stage, as it is too prei-
to require much treatment
during the chill. The patient
should be in bed and cover
warmly, to drink may be given
lemonade, toast water, balm
tea and mint, applied externally
to the cold and extremities
if the chill be severe the bot
water bottle may be used. The
emotional alleviation must be
directed to the alimentary
canal and emetics may be given
if this means directly interrupt
menstruation or lactation

Has should be followed by warm water or warm chamomile tea. In acute cases calomel is always needed. Calomel is the most adapted to the case, it remains best in the stomach and acts on the liver and secretory functions and has a tendency to set the circulatory system in a glow. The [illegible] is given first in a tablespoon quantity and in the course of eight or ten hours should be followed by half an ounce of sulphate of magnesia. It may be given with rhubarb & soda, or compound extract of colocynth eight grains

grains of each being given for a dose, three or four compound cathartic pills an infusion of senna with epsom salt manna and fennel seed, of which a small wineglass full may be given every two hours till it operates the cathartic should be given as soon as possible if the patient feels such as cramps tube calomel which causes pain in the stomach and bowels the mercurials, pills may be given in dose of five to fifteen grains combined with extract of jalapa or rhubarb After the bowels have been

thoroughly examined it was a
important to know the cause of
the complaint this is to be done by
medicines which are given for the
purpose. Bleeding may be of great
importance in cerebral and plethoric
patients and should be practised with
caution. Blood may be taken from
the arm in patients with full pulse
no flushed and pain in the head
especially when these symptoms
continue after repeated evacuative, blood
may be taken to the amount of
twelve ounces when the
pain does not cease opium may
be given in one grain doses or it
should be administered

[illegible] Fever should [illegible]
[illegible] [illegible] [illegible]
[illegible] the Ammonias may be
used with advantage one Twelfth
to the Sixth of a grain or liter
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
draught is the best diaphoretic in
Bilious Remittent. [illegible] it should
always be prepared with citric
acid or lemon juice and carbonate
of potassa. Should have citrate
of Potassa for its base in advanced
stages in which rheumatism
is associated. The compound [illegible]
of [illegible] and [illegible] [illegible]
be given in doses of five or ten grains

[illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] and
[illegible] [illegible] most beneficial in
[illegible] Exacerbation in mild cases
[illegible] [illegible] other remedies will
be required. The cure may be materially
assisted, by the use of Quinia
Calomel. It is necessary that it should
be given in all forms of Bilious
Remittent. The dose should be
from a half to a grain every hour
or two. But that a quinine is the
most important remedy in the
treatment of Certain cases of
Bilious Fever. From [illegible] to
twenty grains given in a single quin
dose is not mistaken [illegible]

Towards this should a continued or
lingering diarrhœa should
further exist at the junction
of the vermiform appendix with
the large intestine, the same quantity
of Calomel may be given, but the
dose of Calomel should be
given the morning and subsequent
doses may be given before the
breakfast which is very common
may be treated with Camp.
Assafœtida, Valerian and Musk
The most effectual remedy is Musk
Tincture. There is no drink more
suitable during the rigors excoriation
than ice cold water. It should be taken
in small quantities, not more than

two drams of alum water mixed
with current jelly, blackberry jelly
brown sugar, toast and tea is
a good diet. Still another mild
is gum arabic dissolved in water
in the proportion of one oz. to the
pint. It may be sweetened with
sugar, lemon juice, barley water or
rice water. As the patient improves
he may take a cup of black tea
with a biscuit or two. Toast or stale
bread with a substitute of
gruel of oatmeal, ground rice,
or farina may be used. To which a
little milk may be added, when
tolerated, a little or stewed milk
may be substituted, that of the

and when the Stomach is so
require further support, Animal
broths may be given such as beef
tea, there is nourishment and
which may be given, but with
care so that the Stomach be
not over loaded

With the bowels we should
a clysma or Injection two times
a day, my Injection Douches are the
best, eighteen hundred and Ninety

No 67 —

A Clinical Report

Submitted to the examination

of the

Trustees, Regents and Faculty of Physic

of the

University of Maryland
for the
Degree of Doctor of Medicine
by

Henry Darlington
of
Maryland

Case No 1

Wm Waters - waiter Aet 30 - Admitted April 20th - has been sick three days -

His parents are both dead - his mothers general health was always good but his father died of some chest trouble -

Patient has lived in a malarious district and has had Intermittent fever - has also had some chest trouble before - which readily yielded to treatment - otherwise his health has been good - Sunday evening April 17th he was taken with a very severe chill which was followed by fever & a copious perspiration next morning he woke up with a sharp pain in his left side which has continued up to the present time -

April 21st - Patient slept well last night intelligence

perfectly clear—No pain anywhere except inside
Tongue moist but coated with a white fur
Appetite bad but dijests what food he can
take—His expectoration is tenacious & somewhat
tinged with blood—rust colerd—
Physical signs—Pulse 104 full rapid & quick
Respiration 40 hurried & labowed—Percussion dull
from nipple all around to lower part of chest
Auscultation—Absence of vesicular murmer in
lower part of lung—And near the middle lobe
of same lung there is a moist rubbing sound
Diagnosis—Pluro Pneumonia
Prof Donaldson ordered the following prescription

℞ Potassa Nitras ℥ii
Spiritus Etheris Nitrici ℥iij
Syrupus Scilla ℥j
Aqua Pura ℥viij

Rx. S. Tablespoonful every four hours—
Evening—Patient general appearance better—
Pulse 100 Respiration 32 & much easier—
April 22nd— Tongue dry and coated Pulse 100
Respiration 36— Percussion gives a dull and
empty sound over the left lung posteriorly
dulness not so marked anteriorly. Right lung
clear— Prof Donaldson ordered a blister 3 + 4 inches
over the lower lobe of left lung and Pulv Doverg x
at bedtime if restless
Evening—Patient expresses himself as feeling
little better— but complains very much of the
blister which seems to be drawing nicely—
Pulse 96— Respiration 36 & much laboured—
The thorax does not expand much but the
abdominal muscles supply the difficulty
April 23rd— Patient slept well last night

after taking the Dovers Powder— This Morning he has no appetite & seems very weak— Pulse 100 harder & more resisting than yesterday. Respiration 40 and much more laboured Prognosis not so favourable—

Dr Donaldson ordered ℞ Spts Vini Gallici ℥ss every three hours— ℞ Pulv Dover gr X— at Night Stop Syrup Scilla in the Prescription of twenty first— Evening— Condition not Materially changed— Pulse 102— Respiration 36

April 24— Patient did not sleep well last night— his cough was very troublesome but the sputa not so high colored or tenaceous.

Tongue slightly furred in centre but red at edges— Pulse 98 Respiration 40— Alæ Nasi contract and expand during Respiration.

Effusion in plura less— nor is there an entire absence of vesicular murmer as at first

Evening- Patient appears more troubled in his breathing & has a constant desire to cough which he tries to prevent- Skin is moist, in fact he seems to be perspiring freely- Pulse 102- Respiration 48 & laboured- Position of patient is on his right side & partly on chest- Expectoration not so much in quantity nor near so rust colored- in fact it is of a muco-purulent character

April 26th Expression of countenance better- Skin moist- Tongue slightly furred in centre Pulse 80 soft & natural Respiration 22 & easy- indeed patient appears better generally

April 27th By percussion we have not so much dullness or flatness as heretofore. Auscultation reveals a weak bronchial respiration a little to left of scapula- also some rude respiration in

front - and at the end of inspiration we hear a remnant of crepitant rale. Prof Chew ordered all medicine to be stopped & to have a good nourishing diet.

May 4th Patient has daily improved since 27th and to day he left the house entirely well

Case No 11

Thomas W. Bird - Occupation coachman Aet 20 - Was admitted into the Bellevue Infirmary Aug 26th His parents are both living and healthy people - Patient states that he has always been well & healthy - On Saturday last Aug 18th he was busily occupied during the day & drove to the country at night when he first complained of pain in the head & right side but had no chill - he does not appear to have lost much flesh but is somewhat anemic. Countenance wears a natural & not distressed appearance - Appetite good Tongue very little furred - Bowels have not been moved for several days. Urine scanty & passed with some difficulty. Alae Nasi expands & contracts during respiration which is not much laboured

and 36 per minute - Voice natural - Cough not frequent & moist - Expectoration thin & slightly mixed with mucus - The muscles of the chest work natural but the whole mass appears to move at the same time - Vocal vibration does not appear to be increased -

Percussion - Lower lobe of right lung dull with a sense of resistance given to the hand - Resonance deminished in middle & upper lobes -.

Behind it is dull throughout great extent of lower two thirds - Left lung less resonant than normal but not dull nor does it give the same sense of resistance as in corresponding part of right lung. Auscultation - Right lung respiratory sound entirely absent in lower lobe but conducting sound of heart heard distinctly - Middle lobe fine crepitation with rude respiration

Apex nearly normal – Behind respiratory murmur absent in lower & middle lobes – Dude at Apex
Left lung, in front we have deminished vesicular murmur at base with pueile breathing in middle and upper lobes, we also have broncophony over whole of right lung in front.
Aug 28th. Pulse 84 and quiet – Respiration 34 – Temperature of body in the axilla 102 – He has a slight cough with thin mucous expectoration.
Percussion flat in whole of right side from beneath the scapula to the base of the lung with weak bronchial respiration behind becoming more feeble as you come in front, there is also a light friction sound ~~as you~~ over the scapula and at the end of the respiratory act high up in front is heard a feeble crepitant rale.
Diagnosis Duro Pneumonia

Was ordered by Prof Donaldson to take

℞ Epts Vini Gallici ℥ss every three hours with beef tea & Milk Aiii during the day & solid food if he can digest it. ℞ An Child Silk jacket to cover the chest & Pulv Dover gr X at Night if necessary – Evening – Patient expresses himself as feeling no worse than in the Morning but complains of pain in right side and under the scapula – did not take the Pulv Dover – Pulse 96 and rather feeble Respiration 32 not much laboured

Aug 29th. Patient slept well last night – was sitting ~~well~~ up in bed this Morning – Expression of countenance natural – he is perspiring quite freely but his temperature by the Thermometer is 102 2/5 – Pulse 98. Respiration 32 and not laboured Same treatment continued

Aug 30th – Patient feels no worse this Morning and

asked permission to sit up which was not granted for fear of fatigueing him too much — he slept well last night without an anodyne — Tongue moist but thinly furred in centre with a white coating
Cough slight soft & moist with no pain —
Temperature of cutaneous surface 101 4/5 — Pulse 100 and soft — Respiration 32 not laboured —
Auscultation reveals a gradually increasing bronchial respiration in right lung toghther with a ~~mixed~~ returning fine crepitant ~~Mixed~~ with a subcrepitant rale
In left lung there is a little rude respiration
He had a free passage from bowels this morning & his kidneys are acting well
Prognosis thought to be better. Same treatment continued
Aug 31st. Patient feels much better to day

Slept well last night - Countenance wears a natural & calm expression - Appetite good Tongue slightly furred & moist - Bowels moved this morning - Kidneys acting well has passed 40 oz of urine in the last 14 hours, the specific Gravity of which is 1014, and heavily loaded with the chlorides - Pulse 82 and its character much improved - Respiration 32 and easy - Temperature of cutaneous surface 100 2/5 — Auscultation reveals that there is much more air permeating the right lung than there was yesterday, the bronchial respiration is much clearer in the upper lobe, with a returning fine crepitant mixed with a sub crepitant rale in the middle & lower lobes Prognosis undoubtedly better - Was ordered to take the Spts Vini Gallici ℥ss every four hours.

instead of every three hours - to continue the beef tea & Milk with some solid food during the day -

Sept 14th - Patient did not sleep well last night he says from the extreme heat - his countenance is bright & he looks well this morning Pulse 76 soft & natural - Respiration 30 & not much laboured. Skin soft & moist - Thermometrical temperature 99 3/5 - His bowels were moved last night - Kidneys acting well, has passed 38 oz of Urine in the last 14 hours - Specific Gravity 1014 with an excess of the Chloride of Sodium -

Percussion not so dull as yesterday

Bronchial Respiration feeble except in axilla with a broncho Vesicular respiration where there was yesterday a few crepitant & subcrepitant rale - Prognosis rapedly improving -

Ordered to stop the Alcohol & give the following tonic Mixture before each meal-

℞ Tinct Cinchona Comp ℥ii

Acid Muriatic dil ℥i

M. S. ℥i before each meal in water-

Sept 2nd - Patient slept well last night and is improving - Pulse 80 and of natural force - Respiration 24 and easy - Thermometrical temperature 99⅘ - Auscultation and percussion gives a clear and more natural sound - Bowels moved this morning - he has passed 48 oz of urine in the last 24 hours Specific Gravity 1014 -

Prognosis decidedly improved since yesterday

Same treatment continued -

Evening patient left the house this afternoon contrary to the wishes of the attending physician but he was beyond all doubt convalescent

Case No 111

Thomas Pager Occupation Sailor Admitted in Baltimore Infirmary Sept 7th His parents are both dead and he states that neither his father nor Mother had any chest trouble

Patient has always been a temperate man and generally healthy About three years ago he was sick but dont know what his disease was since that time he has been very healthy

On Wednesday 5th inst he went to his bed as usual but passed an uncomfortable night and got up Thursday morning with pain in his head and limbs which continued until his admission with loss of appetite & nausea every evening with an emesis once or twice of a greenish looking matter.

To day Sept 7th his countenance has a depressed and

anxious expression. Has no appetite. Tongue slightly furred & dry. Pulse 140 & feeble. Respiration laboured and 40 per minute. By percussion we have dullness over the lower lobes of both lungs & resonant throughout. Auscultation reveals a fine crepitant at the base of both lungs, but more marked in the right lung

Diagnosis Pneumonia

Treatment. Was ordered Spts Vini Gallici ℥ss every three hours with beef tea & milk ad libitum, also an oild silk jacket to cover the chest.

Evening. Patient complains of insomnia and is ordered ℞ Pulv Dover gr X at bed time.

Sept 8th. Patient did not sleep well last night but seems better this morning

Expression of countenance better. Pulse 100

Respiration 32 per Minute & easier—
Percussion dull at base of both lungs but not flat— By Auscultation we find that there is absence of vesicular murmer in lower lobes of both lungs—in the middle lobe of right lung there is a moist crepitant rale—Urine scanty the Spec Grav 1020 with ~~the~~ an entire absence of the chloride of Sodium—
Evening— Patient does not seem so well as in the morning— His countenance wears a distressed look— Pulse 110— Respiration 40 and very much laboured— He had an attack of Pleurisy this afternoon— Skin hot & dry— No cough
Sept 11th— Patient says he did not sleep well last night but feels better this morning and he is more quiet in every way—
Expression better— Skin soft & natural

Pulse 88 and full - Respiration 28 and easy
Was ordered by Prof Chew ℞ Quinia Sulph gr v ter
die in solution
Sept 12th. Patient slept well last night & seems
much better this morning - He had a slight increase
of fever ~~this~~ yesterday evening but this morning
his countenance is good. Skin soft & natural
Pulse 80 & full - Respiration 20 and natural —
By percussion we find very little dullnes in
lower lobes of both lungs Auscultation reveals a
fair respiratory murmer at base of lungs with
a slight subcrepitant rale heard in lower lobe
of right lung in some of the inspirations —
Sept 13th - Patient had no rise of fever last evening
slept well during the night & says he feels much
better this morning - Pulse 75, full & natural
Respiration not laboured & 20 per minute —

Skin soft & natural—

Sept 14th—Patient slept very well last night and expresses himself as feeling very well this morning Skin soft & natural—Pulse 68 & regular—Resp 16 and easy—Appetite good—Lung resonant on percussion & the vesicular murmer heard distinctly—Urine passed freely Spct Gravity 1020 Normal amount of the Chlode of Sodium

Prof Chew ordered ℞ Spts Vini Gallici ℥ss every four hours instead of every three hours

Sept 16th Patient pronounced convalescent and to all appearance he ~~has~~ is a well man—Pulse and Respiration natural—Percussion shows a little dullness—but on auscultation the Vesicular murmer is heard distinctly in both lungs

Case No IV

Martha Walford - Set 11 Occupation servant
Residence Baltimore - Admitted in University Hos
pital Sept 1st - Patient is a negro girl & formerly
lived in Caroline Co. Md Seven weeks ago moved to
Baltimore where she has been living up to the present
time - Her Mother dont recollect of her having
any sickness except Pertussis which was five years
ago - About six weeks ago she contracted Scarla
tina from one of the Children in the family for
which she was working, she also assisted in nursing
the child until she was taken sick herself -
Was treated by Prof. Johnson for Scarlatina and
in third week of her illness was able to get out of
bed & go about the room, but on fourth or fifth day
of her convalescence she complained of violent pain
in her head & there was also observed to be some swelling

about the face two days afterwards she was seized with convulsions which continued every hour or two during the night & next day. On third day again got better under treatment. Five days ago, that is some five weeks after first attack of Scarlatina she had a return of convulsions which continued to grow worse, and the patient making so much noise in the house being afraid of the most trifling things such as flies imagining them to be snakes or some other hideous monsters. She was removed to this Hospital for treatment.

To day Sept 1st She presents the following symptoms. Lays on her back with mouth wide open and has a convulsive maniacal stare with convulsive twitching of the eyes & pupils dilated.

She takes no notice of anything nor will she respond to questions. Physical signs. Pulse 66 & very tremulous

Respiration 16 very much laboured - Tongue coated with a white fur - Skin hot & dry - Urine almost totally suppressed - Bowels constipated

Diagnosis Uremia

Prof Donaldson in the absence of Prof Chew ordered ℞ Eleterium gr 1/8 every four hours until it acted freely on her bowels - Cupping 3 cups over the region of each Kidney - And to have a hot air bath twice daily - Diet to be liquid

Sept 2nd = Patient appears about the same as yesterday as regards her general appearance Her lips are parched & dry - Tongue is still furred but more moist than yesterday, nor is her skin as dry - Pulse 80 & tremulous - Respiration 20 and laboured - The patient had two evacuations during the night and also a copious diaphoresis after the hot air bath - The Eleterium ordered

to be stopped & to take a drink flaxseed tea
ad libitum

Sept 5th – Patient is a great deal better to day
her general appearance cal'm & easy – Tongue moist
and nearly clean Skin moist & quite natural
Pulse regular & 78 per minute – Respiration 18
and easy – Has had no convulsions since the 9th
All treatment stopped with the exception of the
flaxseed tea

Sept 12th Patient has gradually improved since
the 5th and was pronounced by Prof Shew this
morning as being well

Case No V

Robert Cloney – Act 35 – Occupation tailor

Admitted Aug 28th /61

About two years ago he had an attack of –
Gonorrhea which was followed in about 12
Months with a stricture of Urethra – for which
he had been under treatment up to the time of
his admission into this Hospital

About two years ago patient says he suffered
from an occasional pain in the region of the
Kidneys which he thought was caused from
constant sitting

While in the house he had been under treat
ment for the stricture which was being gradually
dilated with the conical bougies – he was also
taking an infusion of Pairera Brava –

On the Morning of the third of September

Dr. Butler passed a steel sound No 8 into the bladder and detected a small stone which he proposed to remove on the fifth of Sept by the lateral operation for Lithotomy

Sept 5th. After all things were prepaired and Chloroform administered a grooved staff No 8 was introduced into the bladder & the patient seated in the usual position the staff was then held firmly under the pubes by Dr. Allen Smith The usual external oblique incision was then made extending from about an inch & a half above the anus & a little to the left of the raphe to a line midway between the ischium & anus the tissues were then carefully divided deeply behind the bulb into the groove in the staff turning the knife backwards. he then divided the prostate to the proper extent. Little or no urine escaped

the bladder being somewhat contracted
The forefinger of the left hand was then introduced along the staff through the opening intentionally made small into the bladder when it touched the calculus — the staff was then withdrawn & the forceps introduced & a small mulberry calculus was grasped & extracted without any difficulty — He then passed a large steel sound through the wound into the bladder but could find no more stones
The hemorrhage was minous & moderate so that the tube was introduced & the patient untied & put to bed without delay
Sept 6th — Patient feels very comfortable this morning except a slight scalding at the neck of the bladder — His skin feels quite natural — Tongue but slightly furred & moist

Pulse 99 and soft – Urine passed through tube

Sept 7th – Patient passed a good night & has a cheerful & contented expression of countenance –

Pulse 92 – Skin cool & moist – has no pain except the smarting caused by the flow of urine through the wound & that is subsiding – Bowels not moved since the operation –

Sept 8th – He feels some fullness about the abdomen supposed to be caused from constipation Ordered ℞ Olei Ricini ℥ss at once

Pulse the same as yesterday

Sept 9th – Patient feels better – Pulse 84 Natural Tongue clean – He has had two or three operations since taking the Oil – The tube was removed this morning but he continues to pass urine through wound –

Sept 12 – He complains of fulness in the

abdomen & was ordered ℞ Oleum Ricini ℥ ss at once.
His urine is flowing through its natural passage
the Urethra to day
Sept 15th - Patient is walking about his room
this morning, it being the tenth day after the
operation - Urine has been passing per Urethra since
the twelfth but he complains of some incontinence
which I think due to sympathetic irritation from
the wound to the bladder
Sept 22nd, Patient left the house to day a
well & healthy looking Man.

And now Gentlemen of the Faculty of the
University of Maryland as I have finished
my Reports I must needs stop. In doing so
I will take this opportunity of thanking
you one & all for the Kindness, Courtesy and

kind attention you have shown me since I have been a student at this College.
Gentlemen, I feel that I have reason to thank you and I do thank you sincerely, but I cannot do so without regret or concern for I am aware that I have heard my last lecture not only of this course but the last of any that I may ever have the pleasure of hearing within the walls of the University of Maryland.
The rules & precepts that you have so earnestly endeavored to teach me, I hope with your consent soon to be called upon to test by my own experience when I shall have to adopt or reject them accordingly - but be that as it may I shall always cherish them as the true doctrines a

viewed in the present light of our rapidly advancing science. As years & years roll around new theories will be advanced which we will have to test by practical experience the true basis of rational medicine

Respect Yours
Henry Darling.

AN

Inaugural Dissertation

ON

Typhoid Fever

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Hugh R Green

Of

Virginia

Session of 1866-67

Typhoid Fever.

It cannot be supposed that a student with only the limited knowledge he may have gained from the few cases which may have fallen under his notice in the clinical wards of a hospital while attending lectures can advance anything new concerning a disease the pathology of which have given rise to so much discussion among many of the most learned. I am persuaded I do not intend or propose to touch upon any of these mooted points, but simply to advance those ideas which after reading, carefully different writers upon this subject seem to me most plausible.

The nomenclature of this disease has been a subject of much dispute, and many different names have been proposed by different

individuals, all of which are alike open to some objection. I will therefore adopt the one by which it is most commonly known in this country, Typhoid Fever.

Anatomical Characters.—The characteristic lessons of this disease are found in the Peyerian, Solitary and mesenteric glands, more particularly in the two former. Early in the disease the Peyerian and Solitary glands become enlarged from a deposit of morbid material, (known as Typhoid Material) into their sacks which causes them to project into the intestinal canal several lines above the surrounding mucous membrane. These glands are hard to the touch, and the vessels around their bases are dilated, injected. According to Flint these phenomena are to be seen as early as the second day of the disease. The glands having attained their

full size. Pus forms and the congestion subsides. Elimination of the morbid material now commences. This may be effected in several different ways. In the first place the gland will become soft, the sack will burst and allow the contents to escape into the intestinal canal. The vesicle then obliterates and cicatrization takes place. In the second place elimination may take place by sloughing which may extend to the muscular or even the peritoneal coat, or perforation may be the result, giving rise to peritonitis. Ulceration may take place and like sloughing may produce perforation. The perforation caused by sloughing is much larger than that caused by ulceration. Ulceration which usually commences about the eighth or tenth day is characterized by an aggravation of the

original symptoms of the disease. Febrile symptoms are increased and abdominal symptoms become more distinctly marked. The elimination of the morbid material follows in the order of its deposit commencing in those glands nearest the Coecum and gradually extending to those above. The following are the characteristics of the ulcers of Typhoid fever. (1) They are situated in the lower part of the ileum and are larger and more numerous near the ileo coecal valve. (2) Their form is either elliptical, circular or irregular, accordingly as they correspond to an entire patch of Peyers glands a solitary gland or a portion of a Peyerian patch. (3) They do not form an entire circle around the intestine as do tuberculous ulcers but their long diameters correspond

with the long diameter of the intestine. (4) The elliptical ulcers are always opposite the attachment of the Mesentery. (5) Their edges are overhung by a fold of mucous membrane and are not undermined as is the case with tuberculous ulcers. Cicatrization usually commences towards the latter part of the third week. It takes place by the growth of a delicate membrane in the base of the ulcers to which the edges of the mucous membrane becomes adherent and the ulcer gradually heals. The cicatrices never constrict the diameter of the gut. Simultaneous with these changes in the Peyerian and Solitary glands, there is series of morbid phenomena taking place in the mesenteric glands. They also become enlarged from a deposit of the morbid material, which may

either be absorbed or removed by sloughing. The slough being discharged into the abdominal cavity giving rise to peritonitis. In this disease there is usually more or less enlargement of the spleen. The blood found in the vessels after death is of darker color, contains fewer red corpuscles, and less fibrine than normal blood, and it does not coagulate readily. If much fibrine exists it is due to some local inflammation. There are other lesions which are occasionally found in this disease after death but as they are by no means invariable I need not dwell upon them here.

Clinical History. This disease is generally preceded by symptoms of indisposition varying from three to ten days. This is called the prodromic stage and it is often a matter of difficulty to ascertain

precisely the period at which the forming stage ends and the disease proper commences. Flint adopts the period at which the patient takes bed as the commencement of the disease. The disease is generally preceded by a sense of chilliness which is more or less distinctly marked. Cephalalgia in which the pain is referred to the forehead. Anorexia, frequently nausea and vomiting. Lassitude. Epistaxis and Diarrhoea. The two latter may be considered as strongly diagnostic. The face is more or less flushed in the early stages and as it advances the countenance assumes a dull and listless expression proportionate to the severity of the disease.

Although the patient may suffer a considerable amount of pain in the commencement of

The disease yet in the advanced stages it is not usually a prominent symptom if it exists at all. This is probably due to the exhausted condition of the nervous system. Delirium is present in a majority of cases. The precise period of its appearance varies. It may be slight or it may be a very conspicuous symptom. In some cases it is of a very mild and passive character and the patient can be very easily controlled by persuasive measures. In others it is very active the patient often requiring forcible restraint to keep him in bed. In the advanced stages the patient sometime becomes listless and almost insensible. He seems to be unconscious of all that is going on around him. He rarely ask for food or drink and frequently passes the urine-

and forces in bed. Wakefulness is a prominent symptom in some cases. Picking at the bed-clothes or invisible objects in the air, and twitching of the muscles, usually denotes gravity of the disease. Anorexia is present in the majority of cases yet in some instances the appetite continues good throughout the disease. Until perception becomes blunted there is generally much thirst. The tongue though sometimes only furred is generally thickly coated. Haemorrhage from the gums is an occasional symptom. Inflammation of one or both of the parotid glands is a rare symptom yet it may take place at any stage of the disease or during convalescence. Diarrhoea exists in a large majo-

ity of cases, yet in some instances we meet with constipation which by some practitioners is regarded as a very favorable sign. Haemorrhage from the bowels sometimes occurs, but is not to be regarded as necessarily a fatal symptom. Tympanitis or meteorism, tenderness & pain on pressure and gurgling are important symptoms and are highly diagnostic of this form of fever. Perforation giving rise to Peritonitis may occur late in the disease or during convalescence and in some cases after apparent recovery. It is likely to occur in mild as well as in severe cases. So that the severity of the fever is not always proportionate to the amount of intestinal lesion. The sudden appearance of Perito-

nitis in the latter stages of the disease or during convalescence denotes perforation of the intestine or sloughing of a mesenteric gland. One of the most important diagnostic symptoms is the appearance of a rose colored eruption which usually takes place from the seventh to the fourteenth day. In the majority of cases it is most distinct upon the abdomen but in some instances it extends around on the back. The eruption consists of minute isolated papules which run in numbers in different cases. They disappear upon pressure but resume their original color when the pressure is removed. We sometimes meet with perspiration which is more or less general, in the progress of the disease, and which usually makes its appearance at night. But as a rule we

and the skin hot and dry. The urine is scanty and deficient and of increased specific gravity, owing to increase of organic matter, especially urea and uric acid. The temperature is much raised above the normal standard, sometimes rising as high as 105° or 106° or even higher. According to Liebermeister it reaches its maximum height about the third or fourth day, and the evening temperature is generally two or three degrees higher than the morning temperature.

Causes. Enteric fever is not confined to any particular locality but is endemic in every inhabited part of the globe, yet in those countries where malaria and fevers are common it prevails to a more limited extent. It is one of those fevers of long fever

being very much more in those of advanced life. This has been accounted for by some upon the ground that the Meibomian and Sebacea glands disappear in advanced life being rarely found in persons over fifty years age. It is acknowledged by all authors to be more or less contagious. But that it occurs spontaneously in many instances there seems to be scarcely little doubt. Most and Hunt both agree that it may occur spontaneously or that it may be brought on by the debilitated condition of animals, for vegetable substances or from such other causes as render the air impure. Although on the other hand it is said it is propagated only by contagion, and that the contagious matter resides in the intestinal discharges. He even goes so far as to say that by the

proper use of disinfectants, (for he recommends the chloride of zinc) "It is not too much to expect that this fever might perhaps become extinct." This is a conclusion which I do not feel warranted in adopting, judging from those cases which have fallen under my observation. I should conclude, with Dr Wood, that if the disease is contagious at all, it must be only occasionally, and under peculiar circumstances.

Diagnosis. The diagnosis is not difficult in the early stages of the disease. The most characteristic symptoms are, the usually slow and insidious mode of attack, the dull and listless expression of countenance, the presence of the characteristic abdominal symptoms which are, epigastric tenderness on pressure and gurgling,

known to epistaxis and the low, discoloration of the secretions, and after the seventh or ninth day the appearance of the peculiar rose colored spots, dryness of the tongue, and finally stupor and delirium. The circumstances of the time together with the season of the year and age of the patient, may also be taken into consideration in forming a diagnosis in this disease, it being more prevalent in the fall of the year and being rarely met with in persons of advanced life. Enlargement of the spleen attended by the death of blood by auscultation may aid in forming a diagnosis. The months with which typhoid fever is most likely to be confounded are, typhus and bilious or remittent fevers, pneumonia, bronchitis, acute tuberculosis and

existence, from which it may be distinguished by the presence of more or less of the symptoms above described, all of which however are not invariably present in every case but generally a sufficient number of them may be recognized to leave no doubt as to the diagnosis.

Prognosis. This disease though usually accompanied with more or less danger is not very fatal. Occurring in young and healthy persons where the vital powers are unimpaired by previous disease the prognosis is generally favorable. It has been shown that the severity of the symptoms does not always bear a direct relative to the amount of injury so the severity of the symptoms does not always bear a direct relative to the amount of injury and while there is no condition so low as to be considered dangerous

bly fatal, yet there is no case so mild as to be considered perfectly free from danger. Regularity of the intestine must take place in the mildest as well as in the most violent cases, which in a vast majority of cases is accompanied with a fatal result. Delirium making its appearance early in the disease. Stupor probably the result of excess of urea and uric acid in the blood, twitching of the muscles, picking at the bed clothes, involuntary evacuations, and extreme feebleness and frequency of the pulse, amounting sometimes to 130; may be regarded as among the most unfavorable symptoms. Yet it does not follow that every patient having these symptoms must necessarily die, indeed there is no condition so low from which we may not entertain some hope that the patient

with fevers.

Treatment: On the treatment of typhoid fever, Murchison, says "it is particularly necessary to prevent by doing too much — by interfering too actively with Nature". Our object should be to sustain the powers of life until the poisonous influence of the fever shall have expended itself, and to treat the symptoms and complications as they present themselves. Chambers thinks that the disease may sometimes be cut short by an emetic if it be administered within the first four days. This is probably due to the fact, that the poison may have been introduced into the stomach and by the early administration of an emetic we cause it to be ejected before it has had time to be absorbed into the system.

Cold affusions to the surface of the body are highly recommended for the purpose of reducing the temperature. Hunt has found the wet sheet highly beneficial, but owing to the inconveniences which may arise from this mode of treatment Sponging the body with tepid water acidulated with distilled vinegar is to be preferred. After sponging it will often be found to add much to the comfort of the patient to anoint the body with olive oil.

In this disease there is a rapid breaking down and waste of tissue. The patient should therefore be well supplied with good nutritious food, in order to supply the heavy demands made upon the system. This should be supplied frequently, ~~xxx~~ in small quantities, and in liquid form. Solid food is inadmissible on-

are the feeble digestive powers of the stomach. Milk is probably the best diet for dyspeptic patients owing to its highly nutritious qualities and to its easy digestibility. The oil globules of milk have no investing membrane and they exist in a state of such extreme minuteness that they are at once readily assimilated.

When there is excessive acidity of the stomach accompanied with diarrhoea, the addition of lime water may be highly beneficial. Animal broths are sometimes preferred, when used they should be well salted.

It is now generally conceded that there is excessive alkalinity of the blood in dyspepsia from Ammonia which always exists as a normal constituent of the blood, and to the presence of which

(according to some of the latest physiologists) it owes its fluidity. is found much more alkaline in this disease. To counteract this "super-alkalinity" of the blood, the mineral acids are the most ex-cellent agents. One of these acids may be diluted and given in doses of twenty or thirty minims every two hours. Chambers prefers the dilute Hydrochloric, while Pitt prefers the aromatic Sulphuric acid

In the use of alcohol we are to be guided by the state of the nervous system. When there is prostration, delirium of a low muttering character, and a tremulous state of the muscles it is required

When pneumonia makes its appearance cupping may be employed with advantage. When there is much tenderness over the right illiac region a few leeches

applied over the seat of the pain will often afford much relief.

Excessive diarrhea is best controlled by opium to which we may sometimes add an astringent. In cases of haemorrhage from the bowels opium combined with acetate of lead is a valuable agent.

Turpentine is highly recommended by Dr Wood in those cases where the tongue instead of commencing to clean at the tip, fills with its fur in large flakes, commencing near its base and extending forwards leaving a smooth and polished surface.

During convalescence, the diet should be carefully regulated, the patient here as well as throughout the entire course of the disease should be well supplied with pure air, and violent muscular exertion of any kind should be avoided.

There are few cases in which the patient sufficiently recovers to resume his ordinary vocation under three or four months.

I have here briefly described the anatomical characters, clinical history, diagnosis, causes, prognosis and treatment of Typhoid Fever. I have not entered so elaborately into this subject as I might have done had time allowed, but have dwelt only on those points which seemed to me most important. I therefore beg leave to submit this imperfect Thesis to the lenient consideration of the distinguished gentlemen into whose hands it may fall, with the request that they will make due allowances for its errors and its imperfections, knowing as they do how utterly impossible it is for the inexperienced stu=

dent to describe accurately those phenomena of disease, a thorough knowledge of which can only be gained by experience at the bed side,

Hugh R. Green
Virginia.

AN

Inaugural Dissertation

ON

Asiatic Cholera

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Allen Fowler

Of

Monroe Co. West Va.

Session of Fifty ninth – 1866 & 1867

"Asiatic Cholera"

Though the great curtain has just fallen by which another year is consigned to the catalogue of the past, yet, it is not thus to be forgotten, but will ever go down to posterity as the year in which that great king of diseases, "Cholera", held undisputed sway over not only India but more or less over the combined world. He by rapid strides region after region was quietly added to his dominions until no kingdom, no province could be considered beyond his reach. Until now every clime, every language, from the learned statesman of Europe to the irredeemable Pariah of India tell the same but sad tale of his last coming. Yes already are to be found victims of this great cycle of death in every land, in every clime. How many there are that have been snatched from the arms of friends by his all powerful hand, to find resting place beneath the mighty waves, unmarked by stone and even not by those who weep the loss of friends, yea, of loved ones - around such spot no mother, no sister, no kind friend can even plant verdure, that fitting emblem of memory.

Go ask that aged mother who so anxiously looked forward to the hopefuy greeting of a son, a daughter, as day after day she from a distance beheld the tempest tossed vessel, in which was the nearest of this; but, lo, and she greeted them not - they his had found a resting spot beneath the surging billows. We are then led to ask what is this great & mighty scourge and whence come it? To solve this question more has perhaps been written than any other medical question of the day and yet we are still left in darkness as to its cause and prevention, notwithstanding the many and rapid strides of medicine. Then ought we not hesitate, yea, falter at such an attempt when we reflect at the mighty array of talent which has so long been engaged with this question? But yet it has only been seen from a distant point, and it is thus we see it. - How true is it that the veil is still unlifted from this disease. How long we are led to ask will the splendid medical talent of this day allow this to exist? Oh! how long let us respect before we may be able to solve this great and important question?

In India it seems to have had its origin and birth and there to exist as an endemic. Some authors trace its history as far back as 1769 and others even further, but positive evidence of its existence, prior to about 1817 is wanting. During that year it first attracted the attention of Europeans as it started on its line of march from place of activity. During the succeeding 15 years it visited with more or less severity nearly the entire world. June 3rd 1832 it for the first time made its appearance in the U. S. on board the brig Carrick, which sailed from Dublin to Quebec and again in 1834 it reappeared - For some time now it is only heard of in India, and again in 1847 it went forth from place to place "seeking whom it might devour", until it completely encircled the globe - reaching that year the U.S. again, and disappearing to return in '66. It may now be said to have withdrawn from our midst but as we much fear and believe not even this time for its accustomed interval of 16 years but again to reappear early in the coming spring. The Valley of the Ganges in India, we find to be its great stronghold - its place of refuge as well as place of birth. Then it is we

find him marshaling all his energies as for some mighty combat, until conscious of power, when he descends like a mighty avalanche, towering above both continent and ocean, until the entire territory of the East acknowledges his sway. But lo, and he stops not but still onward we find his march until now as the entire globe has been invaded and the mission of death upon which he set out has been so successfully prosecuted, that henceforth we are led to hope he will find a more congenial abode in his den – So he may now be truly said to be on his retrograde march. The interval between these descents seems to be about 16 to 18 years. This time being necessary for the recuperation of his forces as well as for the replenishment of his victims. Now and then during the comparative suspension of hostilities we find him as it were testing his strength and organization, by an occasional skirmish prior to testing his regular line of march for the great campaign of death. When conscious of power his mighty arm is felt in close combat.

Formerly all cases were thought to be preceded by diarrhoea, but more recent and accurate investigations prove such not to be the case. According to a recent report of the "Society of Medicine" of Paris, only about 50 percent of all patients treated had preliminary diarrhoea. Whether it does exist in a larger number than by this report we are led to think though in many cases it is of so little importance as to escape the knowledge of the patient. Certain it is that in the larger number of cases more or less diarrhoea does exist, and that this disturbance of the bowels is frequently painless, generally of a serous character, and that it may last two or three days before succeeded by grave symptoms. Quite frequently the disease appears to be ushered in by symptoms of such a serious character as to render the diagnosis quite evident from the outset. In many such cases there was no apparent diarrhoea and yet it had been going on internally, until the bowels were relieved from sheer distension. The discharges at first faeculent and generally painless and in every respect similar to those of diarrhoea constitute what is now

known as "the first stage". Sometimes in this stage there is more or less pain, though this is rare, and when it exists, entirely disappears as the disease progresses, and the discharges change, which in most instances is quite copious. The transudations into the alimentary canal now increase copiously, and the dejections become more numerous and copious. Though faeculent at first they soon become serous and very soon present the appearance of what is known as the "rice water discharge".
In some instances the fever becomes very much slower prior to the attack, but in the great majority of cases the great prognomonic sign is the diarrhoea, followed by "rice water discharges". The appearance of the secretions varies somewhat but are very generally quite distinctive of the disease.
The first stage varies in length from one or two hours to that many days, and more - more frequently being of short duration. Sooner or later this stage passes into one of severer form, known usually as second stage, unless very promptly relieved.
This stage is generally introduced with vomiting unattended by much nausea. At first (1st) the contents of the stomach are ejected and at diminished

intervals, a serous fluid similar to that discharged by the rectum. Unless the patient experiences relief early in this stage, the powers of life will be found to fail rapidly, countenance anxious, the skin becoming clammy cold and bathed in perspiration, pulse weak and frequent, thirst intense, cold tongue and breath, cramps of abdomen and the extremities, eyes sunken, blanches of face and lips and finger nails, goose-skin apparent, and in fine general death like look, indescribable but once seen is never forgotten. This stage generally of short duration is followed by what is called third, cold or algid stage. In this the secretory organs become suspended, the vomiting and evacuations cease, the urine much diminished, if not suspended, and the patient though perfectly cold, complains of a sense of heat. The shriveled skin adheres partially, the pulse is extinct and the heart is scarcely to be heard.
If recovery from this stage takes place, which is exceedingly unlikely, there is then a stage known as reaction and fever: tongue furred; sometimes delirium owing to urea, carbonic acid and other poisonous matters in the system which bring on a low typhoid state

The suffering during all this time, is much less than the gross nature of the disease would lead us think. The pain being due to the cramps, chiefly, which is now generally admitted, is caused by the withdrawal of the watery portion of the blood. The discharges after the second stage comes on, and known as the "rice water discharges", are thought to be composed of serum mixed with dyke, in which are epithelial scales from the lining of the mucous membrane, "resembling rice water in which rice float and floccs of curd in whey". It contains no bile and is devoid of odor. The quantity expelled varying from half pint to chamber pot full at each discharge. The patient usually experiences relief rather than pain, after the evacuations which sometimes cease after several have occurred, and again they may flow without the knowledge of the patient.

It is here we most naturally expect to be enlightened with regard this disease, but in no instance do we find morbid lesions commensurate with the gravity of the disease. No uniformity of structural change, or if any in so instance could they be attributed to "Cholera".

All the great central organs are found more or less congested, but in no case is there inflammation. The mucous membrane of the stomach and lower portion of the oesophagus, is generally more or less congested and ecchymosis occasionally observed. The intestine slightly tumid or congested and contain a portion of the "rice water evacuations" Rarely the entire surface of the mucous tract is stripped of epithelial cells. Liver and kidneys sometimes congested and gall bladder extended with bile, though, sometimes with fluid resembling mucus The urinary bladder empty and contracted. Vacuity of the right side of the heart and flattening of the veins - smaller quantity of blood in the pulmonary structure and proportional decrease in weight of the Lungs. The blood much diminished in quantity fluidity, is generally thick, black, fluid and portion of it semi-coagulated, being dark and tar like in appearance. Analysis shows deficiency of albumen, fibrin and the constituents of the serum but not of coloring matter. In some cases after death twitchings of the muscles are to be seen and occasionally even a moving of the limbs.

The temperature sometimes rises much higher a short time after death than during life - reaching as high as 104°F. at times. Then upon what pathological principal can we account for death since no anatomical lesions are to be found by which to explain it.? Only by referring it to the powerful depression upon the great nerve centres.
The brain and spinal column both retain their integrity during life and therefore they must be excluded. One of the notable peculiarities being the prevention of the mental faculties undisturbed and the same may be said of the spinal column - sensation & voluntary motion being unperverted until the 2nd stage when cramps only manifest an impairment of vitality. Indeed the contractions of the voluntary muscles after death goes to prove the existence of some sensibility even after organic life is extinguished. Then we conclude it is due to the poison of "Cholera" on the great sympathetic system of nerves, paralyzing the heart and the most important organs of secretion, the Liver and the Kidneys - disorganizing the intestinal secretory apparatus and

disintegrates the blood whereby the serous portion escapes from the system.

".— Within the last thirty years the opinion of the medical profession has undergone a perfect revolution as to the contagiousness or non contagiousness of "Cholera". Then it was almost universally considered non-contagious and now but few are found to entertain such views. That "Asiatic Cholera" requires a special cause for its development but few now deny and that man is the agent through which it is communicated from point to point with a rapidity in proportion to the activity and rapidity of his own movements is an incontrovertible fact. There are those who contend that local atmospheric influence, progressive atmospheric or terrestrial emanations can alone produce the disease but how these advocates of the non-contagiousness of this disease account for its appearance only as transported by man we cannot see. For we have no evidence that "Cholera" can propagate itself at a distance by the atmosphere alone, regardless of its condition and in no instance has an epidemic of this disease extended from one locality to another in a shorter period than

was required for man to carry it. On the contrary we know it never was seen in this country or rather on this continent until the arrival of a vessel at Quebec which first transported the disease – that it first visited the Eastern shore of this state Aug. 1832 upon the landing of Capt. Dodson, who died the following morning of that disease – that it first made its appearance among the Indians after the burial of a "Cholera" corpse – that in fact "Cholera follows the course of it, as does wheat or any other grain and like wheat or other grain it must be carried from shore to shore, and being carried must even when landed and distributed, find a field prepared for it otherwise it will not grow". Though communicable "Cholera" is much less so than such other zymotic diseases as small-pox and scarlatina – It is quite evident that many things in this as other contagious diseases act as ~~exciting~~ causes and chief among these may be mentioned bad water, improper food, a vitiated atmosphere, filth, intemperance in eating and drinking; fever and other depressing agents and of all food oysters

seem to have exerted the last year a greater agency in the development of the disease than almost anything else - All shell-fish proved among the best exciting causes - In all such cases though, the oysters, bad water, fear &c were only the exciting cause by which the already dormant Cholera poison, which was at the time in the system, was caused to be developed into true Cholera. In many instances this poison though in the body would more than likely never have been converted into the true disease in question but for the exciting causes. We are aware such things as we have termed exciting causes, such as bad water, bad food &c, have been generally considered the predisposing cause and such they may be very properly termed when taken before the system come in contact with the Cholera atmosphere; so that whether they be predisposing or exciting causes depends upon priority. Though as we have said in our opinion are more properly the exciting causes - that the system first comes in contact with the poison and in a large number of instances the disease though communicable yet so slightly so as to require either a deranged or disordered system for it

reproduction otherwise in the majority of instances it never matures into the disease proper. The manner in which this is accomplished when the system has all the requisites for virulence, is generally through such agents as we have given.

iii. – When fully developed the diagnosis is quite easy, especially if during the prevalence of Cholera. The pathognomonic symptom being the "rice water discharge" the all important point is an early recognition of the disease and then the diagnosis must be based chiefly upon the diarrhoea. If Cholera be prevalent, though the evacuations are not distinctive of the disease, yet all cases of diarrhoea should be taken as a grave symptom and treated accordingly.

iv. – If the patient be seen early, that is during the first stage the disease will be found in the majority of instances to yield to prompt treatment. But when the second stage is developed the prognosis is very unfavorable – not more than 50 percent if so large a number recovering. Recovery from the third or cold stage is only to be regarded as an exception. The prognosis should then be always unfavorable but much less so in the first than either of the other stages.

ment.- Let it be understood that the activity of the treatment is by no means commensurate with the gravity of the disease - Strong reasons exist for thinking the mortality to have been as great from over dosing as by non medication. For it may be truly said near the entire list of medicines has been brought to bear upon this disease. The first and paramount object is to enjoin perfect quietude both mentally and physically and to this end have the patient repair at once to bed and under no circumstance to get up until advised. The treatment then is applicable to the different stages. before collapse, during the collapsed stage and after reaction. During the entire disease the treatment must be directed to putting a stop to the liquid drain from the blood and chyle-bearing vessels or to restoring to increased power and activity the great ganglionic system of nerves or to both. With a view to the former some of the many preparations of opium are found very effective. The opiate should be in solution that as little delay be experienced as possible in its action. Morphia may be applied directly to the mucous membrane of the tongue or by the hypodermic method. Laudanum or the

aconite tincture are very efficient preparations bearing in the mind the paramount importance of time. For here by the prompt arrest of the intestinal secretion the disease is cut short of a fatal career. To this end the opiate should be given in full doses and if the symptoms are urgent an enema of starch and laudanum. Should there be a praecordial oppression a prompt emetic of mustard and salt or Sulphate Zinc should be given to relieve the stomach of the undigested food. The second indication, exciting inert and activity of the ganglionic nerve centres, is more promptly and efficiently accomplished by Strychnine than any other article of materia medica and its importance we think has as yet not been appreciated. By this course of treatment, if seen early the disease is most frequently very promptly arrested in its first stage. The patient should be allowed water in all stages and in quantity proportional to the calls of the system and at intervals spirit and water and mild farinaceous articles of diet. Most authors permit very little water to be given during the first stage which we think very improper treatment

When the treatment fails to arrest the disease in its first stage, or when the patient is not seen until the second a more active treatment is necessary. It is here the symptoms seem to call for the most powerful treatment in the form of stimulants and anodynes. In addition to persevering in the former course of treatment we now stimulate the spinal column and all the great centres of organic life by sinapisms, wet and dry cupes, brisk friction to the extremities and heat by means of bottles of hot water and warm blankets placed near the body. Here it is that Strychnine is found of more utility than in the first stage. If notwithstanding all this the disease continues to grow worse and the stage of collapse ensues, it then only remains to try still other and more powerful excitants of nerve centres. Ice should be applied along the spinal column, to be followed by brisk friction with a coarse, warm dry towel or what is even more powerful the "cold douche".
Diffusible stimulants as much as the stomach will bear, should be given and concentrated nourishment such as the essence of meat, milk &c, in small quantities if borne by the stomach, to maintain the

powers of the system. And finally we have the resort of injecting into the veins salt & water. In several recent trials of this mode of treatment quite recently in Paris, after all hope of recovery from other means had vanished, the patient was found in every instance to revive and in several cases to enter into conversation; but in the course of a few hours collapse again came on and death speedily ensued. From these examples can we not yet expect good to result from this mode of treatment? We are led to reply affirmatively.

In consideration of the laborious duties of our worthy Professor colour duty it will be to avoid this we shall refrain from any remarks on the "Prevention of Cholera".

Allen Fowler

Univ. of Md.
Jany. 1st 1867

An

Inaugural Dissertation on Typhoid Fever.

Submitted to the examination of the Provost, Regents and Faculty of Physic. of the University of Maryland for the degree of Doctor of Medicine.

By

Daniel F. Bell
Jefferson County
Virginia.

Sess. 1863-64

[illegible] under a
different names, [illegible]
common continued fever, typhus
was known as remittent fever, typhus
abdominalis, typhus and by Prof. Gerhard
enteric fever. The name under
it is most generally known is Typhoid
fever [illegible]
[illegible]
[illegible]
has become so generally adopted that
[illegible]
the best habitat is that it will [illegible]
we to be called by this name.

The disease makes its appearance in
different modes, but generally it

with a chill, rigors, & followed in-

of general indisposition,

heaviness of the whole body and a

but not so

[illegible] and [illegible]
the ordinary [illegible]
attendance such
[illegible] of the skin
[illegible] ist, flushes
[illegible] of appetite, with
[illegible]ral weakness & furred tongue
Some of these sym
[illegible] common to fevers generally are
[illegible] this disease (pe
[illegible]le the flush face is of rather
[illegible] hue which is not
[illegible] typhus fever). There is also
[illegible] expression of countenance
[illegible]

There [illegible]

[illegible]

[illegible] in [illegible]

[illegible] quite [illegible]

becoming more frequent [illegible]

skin increasing in dryness

[illegible] countenance becomes duller

[illegible] grows weaker. The eyes

[illegible] thicker and [illegible]

[illegible] a yellowish or brownish [illegible]

[illegible] cases may be even

The diarrhoea if it existed

[illegible] this time is increased, if it

[illegible] appeared before it is very

[illegible] to makes its appearance

[illegible] abdomen [illegible]

About the seventh or eighth

[illegible] the disease [illegible] a [illegible] eruption

[illegible] skin [illegible] faces, [illegible]

[illegible] numerous small [illegible]

scattered [illegible] [illegible] generally

[illegible] their appearance [illegible]

[illegible] [illegible]

[illegible] these spots [illegible]

and

minimum

delirium and stupor becom

begins to clean itself, a

at once more begins to fa

things transpiring around

returns or inferior

the ab new grows

illy disapp

apparent than

very

in frequency and increases commen

intensity & force,

may b

and creat

much in this disease, as the erythe-

the skin, the

the tympana

iliac region. In

consistency,

[illegible] [illegible] [illegible] that

[illegible] it will be found to exist

more frequently if the disease at the

time there is a tendency to diarrhoea,

The tympanitic abdomen is a com-mon attendant so much so that [illegible] [illegible] says he has very seldom seen a case without some degree of it. His opinion is that it bears some rela-tion to the severity of the disease.

The eruption is very characteristic of this disease, it makes its appearance at dif-ferent periods, from the fifth to the sixteenth day, but more generally appear-ing about the seventh or ninth day.

It consists of small papulae or pimples of a rose color [illegible] as has been before remarked, slightly elevated. This eruption is thought to be [illegible]

[illegible] [illegible] of the [illegible]

being a more frequent symp-
earlier stages of the disease;
the disease progresses it is replaced by
delirium or stupor. The delirium do-
not appear generally in the earlier period
of the disease not until the second week.
It is absent in some cases but is seen
in majority of the cases; as was found
by the observations of Dr Flint.

The delirium is different in different
cases it may be of a violent
kind but generally it is mild,
being attended with

it

[illegible]

imaginary [illegible]

[illegible]

[illegible] of the disease.

His symptom is

a [illegible]

[illegible] inflammation or organic

[illegible] of the membranes of the brain,

but is the result of a peculiar state

of the blood, a certain something

in the blood, [illegible]

[illegible] it unfit for it to circulate

[illegible]

[illegible] in the right

ilia [illegible] sometimes on

the left and at times on both is rarely

absent entirely, and is considered by Dr

Gaint as diagnostic of this disease

Hemorrhage from the nose is frequent

but [illegible] to disease, in the

[illegible] of the [illegible]

not unfrequently [illegible] from the

stomach.

Sometimes during the second week the p[illegible]

[illegible] seized with

his occurrence is not confined to
of the disease. but may occur at a
[illegible]

Pathological Characters — [illegible]
[illegible] in the body in disease [illegible]
[illegible]; but there are some [illegible]
[illegible] of this disease [illegible]
seated in the glands of the small intestine
and in the mesenteric glands. These [illegible]
become indurated and thickened by a deposit
of a certain matter which [illegible] typhus [illegible] this deposit [illegible]
the lower portion of the small intestine and
[illegible]

[illegible] characteristic of this disease as the deposit
continues, ulceration finally takes place
[illegible] of the intestine [illegible] ing
[illegible]
[illegible]
[illegible] is seen. The kidneys

Page [illegible]

Etiology. The true cause seems to be a specific poison which enters the system as a ferment or poison.

It is thought to be contagious by some writers and the probability is that under certain circumstances it is so, although this is denied by some writers.

It is caused sometimes by human effluvia or excretions in a state of decomposition or it is likely to occur in thickly inhabited regions, & [illegible] countries.

Age & predisposing causes. The disease being caused [illegible]

Man in from 20 to fifty years of age. It is always infectious, but is seen most frequent about the age of puberty and from that to twenty five years of age, according to the best authorities. It is [illegible] [illegible]

takes on a typhoid character.

disease with which it is most likely

redness of skin. the tendency of

characteristic symptoms of typhoid fever

such as, tympanitic abdomen, rose-

[illegible]

[illegible] formation of the [illegible]

[illegible] is very [illegible]

[illegible] typhoid fever [illegible]

[illegible] in children; it is [illegible]

[illegible], the [illegible] frequency [illegible]

the acceleration, by the physical [illegible]

[illegible] history, and by the absence

of the characteristic abdominal symptoms

and [illegible] of typhoid [illegible].

It has been before remarked the diseases

with which typhoid fever is most liable

to be confounded is typhus fever, but

by a careful examination of the symp-

toms of the two diseases they can be dis-

tinguished.

Typhoid fever is more [illegible]

[illegible] than typhus fever [illegible]

[illegible] in typhoid fever [illegible]

while in typhus fever, diarrhoea is

[illegible]

[illegible] is [illegible]

[illegible] apparent upon pressure, it is gen[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] typhoid fever occurs more frequently

[illegible] but the age of thirty years or under.

[illegible] typhus fever occurs more frequently a[illegible]

[illegible] the [illegible]

[illegible] over the eruption and dusky hue of

[illegible] countenance exist in a less degree and

[illegible] not so apparent as in typhus

[illegible] typhus fever is rare [illegible]

[illegible] typhoid [illegible]

[illegible]

[illegible] fever rare [illegible]

[illegible] and fever [illegible]

[illegible]

[illegible]

[illegible] diagnosis [illegible] difficult.

Prognosis. — [illegible] the [illegible] fatal disease, [illegible] at [illegible] places, and under [illegible] circumstances than ordinarily. — Dr. [illegible] has remarked "There is no condition so [illegible] no symptom so fatal, that death should be considered inevitable". This opinion is entertained by other writers [illegible] the operations of nature are possible [illegible]. Therefore the Prognosis should always be made with caution [illegible] of the serious character of the disease [illegible] at all times nearly, and [illegible] with which it [illegible] at other times [illegible] the [illegible] miraculous recoveries that some[illegible] place [illegible] that

Treatment.

The treatment of this disease is [illegible] different [illegible] in different cases.

The [illegible] most [illegible] [illegible] and [illegible] the [illegible] is the [illegible] treatment of the [illegible] [illegible]

[illegible] necessary to commence the treatment [illegible]

This disease owing to the [illegible] [illegible] seldom necessary, & even when [illegible]

If the stomach be overloaded an emetic

[illegible]

[illegible] diaphoretics are used with great a[illegible]
[illegible]ge, among them the citrate of po[illegible]
[illegible] the neutral mixture o[illegible] [illegible]
[illegible] are recommended by Prof
[illegible]

[illegible] stimulants such as brandy, wine &c.
[illegible] very useful. Huxams tincture [illegible]
[illegible] good medicine
[illegible] of the [illegible] good
prostration at the beginning of the disease
the use of stimulants will be indicated
from the first.

[illegible] the use of these
[illegible] 20 [illegible]
[illegible] to act with good results o[illegible]

[illegible]

[illegible]

[illegible]

[illegible] or acetate lead. Prof. M[illegible]

[illegible] recommends the use of pills compose[illegible]

[illegible]

[illegible] use the astringents, kino has

been recommended.

[illegible] inflammation of

the gland of the [illegible] is [illegible] Cod oil

[illegible] the best remedies, it is given in doses

[illegible] fifteen to twenty drops every two

[illegible] it acts [illegible]

[illegible] also as a stimulant, [illegible]

[illegible] is subservienes the only [illegible] is

[illegible] the attend[illegible]

[illegible] the urine be [illegible] necessary,
attention to the diet of the patient [illegible]
[illegible] more but most nutritious &
digested articles of food, the animal
[illegible] beef [illegible] & milk, bread
[illegible]

[illegible] its [illegible] & magnesia have been tried
to act with very good results,
Prof. McSherry says he has tried the
not fully enough yet to
as a specific for this disease;
It act by stopping the fermentation
[illegible] The muriatic
[illegible]

[illegible]

[illegible] than [illegible]

[illegible]

[illegible] the lines of the

[illegible] bed linen should

[illegible] as is necessary to consist

[illegible] condition of the patient

[illegible] convalescence, the patient re-

[illegible]

[illegible] of [illegible]

[illegible] in underclothing and bedding

[illegible] the [illegible]

[illegible] and [illegible]

[illegible] as a

[illegible]

[illegible] nutritious food, and gentle

[illegible]

and then [illegible]

[illegible] accompanying

no specific remedy

[illegible] cannot say

[illegible] or course of treatment,

[illegible] useful in one case

[illegible] or even injurious in another

[illegible] most important indication

[illegible] is (as has been before remarked)

[illegible]

[illegible] and to relieve existing symptoms

[illegible] appropriate remedies

AN

Inaugural Dissertation

ON

Dysentery

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

H. W. Wood

Of

Frederick County, Maryland

Session of 1874

Dysentery.

This is a common inflamitary affection of the lining or mucous membrane of the large intestine, Colon & Rectum. Characterized by griping pains in the abdomen termed tormina, straining at stool with a small quantity of mucous more or less mingled with blood, in some cases is abundant and which has given it the popular name of bloody flux. In some cases it is complicated with fever, and others with disease of the upper portion of the alimentary canal and it is thought that those cases which are termed Epidemic dysentery are those in which the

disease is complicated with a typhoid form of fever, or with an extensive affection of the small intestine, where there is iliitis as well as colitis

Sporadic dysentery as it occurs in practice embracing both acute and sub acute affections and presenting symptoms which frequently of more or less gravity, compelling the patient to keep to the bed and sometimes it is an extremely mild and almost trivial affection. But there are few diseases which offer a wider contrast than the one in question from the mildest cases of ~~Sporadic~~ to the graver cases of Epidemic

respect to such an clear
dent that the Tenesmus rec
e most distressing and
e most diagnostic symptom
disease. The pains are irre
gular in position and acc
panied
to stool
pass anything more than a small
which serves to alleviate but
t. Sometimes the tenesmus
pears as if concentrated upo
rectum with a sensation as

leads to the freezer

to cool

as the freezer will allow

ability to evacuate anything

almost [illegible]

often rapidly, fatally

more commonly they are [illegible]

ten to fourteen in twenty-four

hours of the same characteristic

and often in the advanced

stages of the disease there is

[illegible]

[illegible]ciation in some [illegible]

[illegible] of fecal matter

[illegible] are discharged

[illegible] alleviate remarkably all

[illegible] gives great relief

[illegible] the continual irritation and

[illegible] at stool which makes

[illegible] very unpleasant consequences

[illegible] allowed to persist such

[illegible]

hysteria prolapsus &c

Occasionally in some cases

[illegible] severity the vital

[illegible]k and the nervous

[illegible]

a pale cool and

a purplish appearance

skin about the lips and under

and about the roots of the nails, and

all the symptoms are

ch cases the

generally fatal

The duration of disease

is difficult to assign it

in treatment

Duration of
[illegible] from the date of
[illegible] to convalescence
[illegible]
[illegible] by days Dysentery
frequently and in many
[illegible] ates is attended with
congestion of the liver
[illegible] seen which is

[illegible] day

the diarrhoea [illegible]

[illegible] the [illegible]

and irritations of the [illegible]

[illegible] haemorrhoids

[illegible] when the disease is well

developed and attended with

the usual symptoms [illegible]

without complications the

[illegible]

[illegible] in the diagnosis

the disease may be [illegible]

[illegible] diarrhoea of

[illegible]

[illegible] of the natural

[illegible]

[illegible] with

[illegible] head is the

[illegible] Erosion

[illegible] with fecal matter

[illegible] in short - the characteristic

[illegible] excavation are both

[illegible]

[illegible]

[illegible] which consist, more

likely, in inflammatory

[illegible]

[illegible]

[illegible]

The Causes of Dysentery are [illegible] Among the Chief Causes of Acute Dysentery are [illegible] Bad Food, in Indigestible and acrid food Exposure to unwholesome exhalations, Spirituous liquors Rotten Fecces, Sometimes produce the disease and it not the sole Cause of the Sporadic [illegible] [illegible] [illegible] excitability of the mucous membrane [illegible] of Anal

[illegible]

[illegible] skin [illegible]

[illegible]

[illegible] the French Army

[illegible] portion who were reptos

[illegible] [illegible]

[illegible] ins. and Consequently

[illegible]

[illegible] another [illegible]

[illegible]

[illegible] distance not thus

escaped the disease

Dysentery frequently occurs

epidemically prevailing in

[illegible]

[illegible] of Country Miasmatic

Cases were brought

to the persistance and

the fever as when of a

remittent character

occurring in four days

time. Badly ventilated apart-

ment Cants. Hulks Hashila

visions & and in such the

disease may be [illegible]

contagious as the disease

may be [illegible]

[illegible] may be [illegible]

the direct [illegible]

time which is capable of producing

contagious [illegible]

other different circumstances

Both sporadic and

epidemic typhoid are most

prevalent in the intense heat

of summer and in situations

in which intermittent fever is

either not seen in comparatively rare

[illegible]

[illegible]

[illegible] is noticed in this

[illegible] and many other diseases

[illegible] said what ever forces the

[illegible] 5 [illegible]

[illegible] the inferior mesenteric

which carries the blood from

[illegible] and descending colon

and upon congestion of the

[illegible]

is readily engrafted and in this

indirect way dysentery may be

[illegible]

[illegible] disease [illegible]

[illegible] inmates are [illegible]

[illegible] diphtheritic [illegible]

[illegible]

in which careful diagnostic tests have ascertained that the preceding [illegible] not attended with any [illegible] gastric or enteric irritation and when symptoms are exhibited [illegible] show of a dysenteric character it is more likely to be an extension of irritation of the mucous membrane of the stomach and alimentary tract than of malarial origin

[illegible] is not like [illegible] I have said difficult to assign the [illegible] vary with the intensity of the

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Character of the pains becomes

[illegible] diminish and become fewer

[illegible] copious and assume a me-

[illegible] more than a diarrhoea

[illegible] which will soon cease

[illegible] the condition of the

disease continues without relief,

[illegible] a degree of emaciation usually

[illegible]

[illegible]

[illegible] Dysentery [illegible]

[illegible] Pain about the nails [illegible]

[illegible] stools evacuations [illegible]

Tenesmus & you may [illegible]

[illegible] the case is [illegible]

[illegible] the use of the [illegible]

are so numerous such as [illegible]

of Contents of the intestine into the

[illegible] of the peritoneum [illegible]

[illegible] of the walls of the intestine

[illegible] distinguish the ulcerated

[illegible] Malignant [illegible]

The disease is said to Com-
[illegible] The evacuations Contain
[illegible] which is now termed
the Chronic Form and the Evac-
[illegible]
[illegible] less frequently Contain matter
[illegible] denoting inflammation
[illegible] Ulceration, such as mucous
[illegible] flakes of lymph, pus, blood &c
[illegible]
[illegible] ose and Their, the disease is
[illegible] are less mingled with
[illegible]
[illegible] may last for a long time
[illegible] and if not relieved
[illegible] remedies is generally a necessary
[illegible]

[illegible] desire unload as early
as possible the fecal contents
of the bowels and free it
from irritating secretions
[illegible] accumulations, [illegible]
the continual irritation caused
by broken passages over the
[illegible] surface and to pro-
[illegible] this effect cathartics
[illegible]
[illegible] remedies that should be
[illegible]
[illegible]
irritation. the inflamed mem

according to the

[illegible]

[illegible]

[illegible]

[illegible] impaired as thus [illegible]

[illegible] secretion of bile apparently

[illegible] to a stimulating cathartic

and collagogue should

be used and such is supposed

to be calomel in ten or fifteen

[illegible] in doses and followed by, or

[illegible] by other cathartics such

as rhubarb castor oil sulphate

of magnesia Rochelle salts &c. it is

[illegible] its own effect in dis-

It sometimes [illegible] used in
[illegible] of the disease to relieve
[illegible] of the patient - procure
[illegible] diminishing the irritability
[illegible], and when combined
with ipecacuanha acts as a diaphoretic
[illegible]
the patient - he not allowed to rise
[illegible]
[illegible]
[illegible] the [illegible]
[illegible] effect [illegible]
[illegible] the [illegible] inflammation
[illegible]

[illegible] bloody character
[illegible] when the disease is
[illegible]mic and assumes a bilious
character shown by bitterness of the
mouth and a foul tongue, no remedy
it is said can be compared with
ipecacuanha in large doses as 30
grs in combination with laudanum
since it is asserted if kept quiet
[illegible] the [illegible]
[illegible] effect a cure.
[illegible]
[illegible]
of the disease, nitrate of [illegible]

[illegible] recommended.

[illegible] cases when [illegible]

taken place in

[illegible]

[illegible]

[illegible] amount of food during the continuance

of the disease and for sometime after

the period of convalescence the patient

should be strictly confined to

assimilating food and very moderate

quantities as it is sometimes rightly

inferred that the cause of tardy

recovery and frequent relapses

also as it is one of the leading points

in the treatment to [illegible]

easily as possible empty as long

and most [illegible]
should be careful and not allow
himself to be exposed to cold and
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] which the
[illegible]

AN

Inaugural Dissertation

ON

Melancholy

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

William Caulk

Of

Maryland

Session of 1867

Among the numerous calamities by which society is afflicted, those immediately connected with the mind should have the greatest claim on the attention and sympathy of physicians. Prostrating that noble faculty by which man is so eminently characterised from all animated nature, the unfortunate victims of mental disease exhibits the most appalling spectacle of human wretchedness

The pathology of corporeal disease (Except such as are directly connected with the nervous system) has advanced so rapidly within the last century, that those of an acute character are met at their onset by the physicians with zeal

resolution, and compound.
Not so with those of the mind. Their pathology is yet in infancy, and probably ever remain entangled in an impenetrable web of doubt and uncertitude. There is indeed no basis upon which the edifice of investigations can be raised. Post mortem examinations throw little or no light upon their real character: and our barometers and thermometers are here useless instruments of inquiry.
Melancholy, the subject which I have chosen for my Thesis, has been but slightly notice by medical writers: and whenever mention, its symptoms have been so blended with those of

Mania, hypochondriasis dyspepsia, and chronic hepatitis, that the reader finds its impossible to draw a line of demarcation between them.

Melancholy in my opinion, is a disease sui generis, independent of it outset of any other in the Catalogue of nosology. It differs as essentially from mania, as typhus differs from inflammatory fever. One being a disease of low, and the other of high intellectual action.

The attacks also of melancholy are slow, gradual, and sometimes almost imperceptible; the complexion is pale the countenance haggard and cast down, the pulse is weak and quick and the whole animal system

exhibits a state of extreme imbecility and languor. The attacks of mania on the other hand, are sudden and violent, prostrating at once all the powers of the mind; the face is flushed, the countenance raised and commanding. The pulse is strong and active, and the whole animal system betrays a state of sthenic diathesis, requiring the most prompt and vigorous repetition.

It is singular that these diseases should have been identified in medical writers, because the mind is the seat of both.

Diseases constitutionally different, have their seat in the same part of the body. It may be said, however, that they often

terminate in each other, this is certainly a fact, but it goes no further: from them the same disease than to say that sphacelus is inflammation, that phthisis is catarrh or that hydrothorax is peripneumony.

The disease generally called hypochondriasis, in my opinion, is nothing more than a symptom of an advanced or aggravated stage of the one under consideration: the morbid influence of the mind being communicated to the liver producing induration and scirrhosity: but more frequently to the stomach, indicated in that organ by impaired appetite and digestion, acid or oily eructations &c

I have seen instances of Dyspepsia or Chronic hepatitis, unaccompanied with any symptom indicative of intellectual disorder; and when such symptom is manifest I am disposed to think that it may be attributed, and can be traced, to the organical diseases of the Mind itself.

Causes of Melancholy

These are the proximate, remote and exciting. The proximate cause of Melancholy is mental debility. The remote cause act upon the mind through the medium of the nervous system; the most prominent are intemperance in eating, the immoderate use of ardent Spirits, Opium or tobacco

fatigue, loss of sleep, excessive venery and above all indolence.
The exciting causes operate upon the mind through the medium of its passions: the most prominent are death, the loss or ingratitude of friends, disappointed hope, wounded pride, unanticipated misfortune, unexpected prosperity, long continued exertion of the mind, and an increase or loss of money or fame.
Of some persons are more predisposed to attacks of Melancholy than others. They are such as are of sensibility acute and tender, and of imagination lively and luxuriant: philosophers and poets being more especially its victims.
The disease certainly multiplies in proportion as society becomes intelligent and enlightened.
It is rarely to be seen among the labor class, of this community: and it is a fact too important to be pass

over in silence (as Dr Pitts says)
that in all my diligent
observations and inquiries I have
not heard of a solitary case of
this disease among the negroes
of this State.
The Cause of their entire exemp-
tion from a malady so prominent
and deplorable in enlightened society
is to my mind is obvious and
explanatory, and is alone attributable
to the manner in which they are
reared.
Destitute of education, their feelings
are almost entirely of the sensual
kind; for large majority of them
are strangers to both moral and
intellectual pleasure and pain.
Accustomed to labour from their
childhood, it is made agreeable
by habit. Certain of the real
necessaries of life they are never
plagued by the desire of such as are
imaginary

having never enjoyed the sweets of liberty; they form no idea of its charms: the temples of honor and wealth being for ever closed against them, they have neither avarice nor ambition: they form their own notion of moral rectitude and with them polygamy is no crime and jealousy a stranger.
Woman are less subject to melancholy than men, in the proportion of one of the former to at least six of the latter
This striking disparity is owing to the habits of women being much more regular and temperate that those of men.
I am inclined to doubt, however, whether women enjoy the greatest share of intellectual serenity and independence, for hysteria a desease arising from uterine derangement entails upon the mind

Consequences as sad and deplorable as melancholy it self.

(Symptoms of Melancholy)

These depend entirely upon the exciting causes, and are so numerous and diversified, that it would almost impossible to collect and represent them all. The first stage is usually marked by great depression of the animal spirits indicated by langour, apathy, and extreme aversion to locomotion — there is usually added grief, fear, irresolution, anxiety or jealousy.

As the desease advances, the patient generally becomes misanthropic, and withdraws from all intercourse with society. His imagination usurps a dominion over his judgment. He believes that there is some secret enemy, who is bent on his distruction, or that he is labouring under some dreadful desease, from which he cannot recover.

And with regard to such feeling and apprehensions, he entertains such an implicit belief as always to be displeased at any attempt to dissuade him from his error.
The Complexion is pale and sallow the Countenance wan and dejected his affliction is made evident by perpetual taciturnity, excessive weeping, watchfulness, and extreme timidity.
The increased morbid action is often communicated to his physical functions: but more especially to the organs of the hypochondrium, indicated by hepatic obstructions, impaired appetite and digestion

Constipation, &c.

Life is now a heavy burden to the unhappy sufferer, and in a state of despair, he either terminates his afflictions by suicide or sinks into idiotism

(Cure of Melancholy)

Upon this part of the subject I have little to say in addition to what is recommended by medical writers, for the cure of hypochondriasis, dyspepsia, and chronic hepatitis.

From what has already been said, it would appear that Melancholy is no necessarily coeval with intellectual organization, but is rather the result

of pernicious habits and improper education. It would require more time than I intended to devote to these sketches to illustrate this position in a manner that might be considered satisfactory and decisive.
Melancholy being a disease of mental debility, two indications immediately present themselves to the physician

1st

To remove or mitigate the causes which serve to continue and aggravate the disease, and to impart tone and action to the mind itself

The first questions will be answered by a diligent inquiry into the habits of the patient, and if found to be irregular and intemperate it will be absolutely necessary to convince him at once of the only resource, upon which he can rely for happiness and hope.

That he must fly as the most dangerous foe, the haunts and habits of dissipation the midnight revel and bewitching bowl.

That he must at once retrace the footsteps by which

he has betrayed from the simplicity of nature and confine him within the path of prudence and sobriety.
Should the combined co-operation of friends and physicians fail in accomplishing this object the case may at once be ruled as desperate and incurable.
The second indication will be answered by diverting the attention of the patient from his feelings and situation. The associations of his ideas must be changed by an entire removal from every object connected with the cause of his disease

A genuable, cheerful society, travelling
music reading, (never however upon
medical subjects) are best
calculated to effect this object
Tone and action can be
imparted to the mind through
the medium of the body
Temperance and exercise are
the engines by which this effect
is to be accomplish.
I cannot, however, recommend
too highly the great importance
of exercise in the treatment
of Melancholy.
It abstracts the mind from
the pain of recollection the
disappointments of hope, and the

Miseries of Acquaintance.

I have see the necessity of drawing this subject to a close.

For this subject when considered in a moral and metaphysical point of view, presents an extensive field for the researches of the philosopher and the divine.

I cannot conclude however without the hope that some person of talent and opportunity will undertake and render the subject the justice it so conspicuously deserves.

AN

Inaugural Dissertation

ON

Anaesthesia,

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Silas Baldwin B. A.

Of

Maryland.

Session of Feby 15th 1867

Anaesthesia.

Among the many facts which have been developed, and lead to the rapid advance, almost revolution in medical doctrines during the last fourth of a century; Although many of vast importance to our science; there are none equal to that of Anaesthesia.

Surely not one which of itself has contributed so much to the liberation of humanity from pain,

"Which is perfect misery, the worst
Of evils, and excessive, overturns
All patience."

The alleviation, and palliation, of suffering comprehends an important portion of the object of medical science, ennobling this ob-

ject, and rendering it inferior in usefulness and high purpose to no other occupation.

The mere idea of being subjected to the tortures of the surgeons knife, an idea by no means fantastical, alone, would be sufficient to place many who are not possessed of great courage in a condition to require medical council. This timidity has induced many no doubt to incur dangers, which in many cases have resulted fatally, by procrastinating the surgeons interference in order to be conservative of suffering; which dangers are now dispelled, pains avoided, and lives preserved, by the application of this gracious and benevolent discovery.

In treating the subject of anæsthesia, I shall observe the following method.

1st. The etymology of the word.

2nd. Give an outline of my own views as to the importance of anæsthesia compared with other medical agents, or classes of agents.

3rd. Give a brief history of the discovery, and progressive stages of the development of this discovery, before it became so universally acknowledged to be invaluable in the hands of the physician, and surgeon.

4th. Describe the various anæsthetic agents, their mode and measure in which they should be applied, and the circumstances in which their use is indicated.

The word anaesthesia is derived from the Greek a, privative, and αἰσθανομαι, I feel. As now used it means a privation of sensation, and especially of that of feeling. It may be general or partial. But the term is most applied to agents which are received into the lungs in the form of vapours or gases, and produce their effects by passing with the blood to the nervous centres on which their action is exerted. Thus producing for the most part a general effect. The intellectual faculties are probably the first to feel the influence of anesthetic inhalations, a sort of intoxication

supervene, which is very transient, and imperfect power of regulating motion. The sensory ganglia become afterwards affected, and sensation and motion are both suspended, and ultimately, if the quantity ~~if the quantity~~ inhaled be sufficient the medulla oblongata has its actions suspended or destroyed, respiration stands still, and death is the consequence. The effect is generally from the periphery to the centre, and in man from the lower extremities upwards, in the lower animals from behind forwards. The nerves of sensation are affected before those

of motion, and of all tissues the conjunctiva is last affected.

After the periphery, the cerebral lobes next experience its physiological effects, producing the exhilaration resembling alcoholic intoxication.

Next the spinal marrow becomes affected, and accompanying this stage loss of sensation and locomotion.

Next and last in the train of its effects upon the nervous system medulla oblongata experiences its physiological effects, and with this stage respiration is arrested, and life becomes extinct.

Nor one can fail to appreciate the vast amount of importance to be attached to these effects of anaesthetics, in the hands of a skilled physician or surgeon; and their discovery certainly compares very favourably as to importance for usefulness to any other in the science of medicine.

What appliance can be more noble or ennobling than one by which we can palliate or arrest a degree, of the suffering which humanity is heir to?

Such appliances we have in anaesthetics.

The first of exalted and merciful duties for the physician to

perform, is to preserve and prolong the lives of those who have committed to his care their tenderest interests.

The second to avoid arrest and alleviate their sufferings.

The first is to be accomplished without subjecting them to any pain which can safely be avoided; so there is no branch of the practice of medicine upon which the avoidance of pain has not an important bearing.

Therefore it is by no means surprising that the minds of many who appreciate the science of medicine, and its elevation, and advances, should have been directed to

the discovery of a means to prevent the unnatural suffering concomitant with many surgical operations, as also that connected with the discharge of certain physiological functions.

And when we contemplate the simplicity of certain agents, with whose action we are now so well acquainted, we are struck with surprise that this should have been delayed for so recent a discovery. And we cannot but regret for the sufferings of the past, owing to the want of light being evolved from the chaos in which many before us in the profession, labouring, but from which we of modern times

are being so rapidly liberated by the advances of modern physiology. Having attempted feebly and perhaps inefficually, in a brief space to give an outline of the etymology, and physiological effects of anaesthesia; and to prove the magnitude of importance to be attached to its employment, by the medical man in the discharge of his errand of mercy among ~~among~~ the sick and suffering;. I shall now attempt to give a brief history of the discovery and progressive stages in the completion of the means by which this end is accomplished.

For which information I am indebted principally to the lec-

tures of the accomplished Professor of "Materia Medica and Therapeutics" in the University of Maryland.

I shall consult my own observation during my stay in "University Hospital," for the effects to be gained and fears anticipated in the employment of these agents. This has been sufficient to assure me, among other things, of the efficiency and value of anaesthetics, and that the dangers attendant upon their administration have often been greatly overestimated.

It is certainly great cruelty to subject a patient to the agonizing pains attendant upon

many surgical and obstetrical operations, morally harmless if we possess a means morally harmless, and but very slightly if at all physically so to put it. Such an agent we certainly possess in Sulphuric ether and its kindred agent Chloroform.

The discovery of the employment of anaesthetic inhalations like many others of importance has been claimed by and the honour connected with, if honour it can be termed when it was probably more the result of accident than of ingenious investigation, by different individuals.

Chloroform inhalations were used

as long ago as 1796 by Dr Pearson of England, but with no eminent degree of usefulness, and not to the production of anaesthesia, but in the treatment of pulmonary diseases. They are also mentioned by other authors of the same period.

The idea of controlling the pain of surgical operations has long been a favorite one, and various means, at various times resorted to with a view of realizing it. These attempts had very generally failed, or met with but partial success until the introduction of ether inhalation. Sir Humphrey Davy reported success in controlling pain

in his own person by inhaleing nitrous oxide, and Mr Horace Wells made some experiments with the same agent not entirely without success as early as 1844.

The credit of this discovery is due to our own country, for it was not until 1846, that Dr Morton of Boston after many cautious trials, performed the first operation under the influence of anaesthetics, namely the extraction of a tooth, and the agent used was sulphuric ether.

He then induced Dr Warren to use inhalations of the same agent in an operation at the Massachussetts General Hospital. This

operation was performed Oct. 15th 1846. And the effect was but partial. On the next day another operation was performed by Prof. Hayward, in which operation ether was used with the effect of rendering the patient completely insensible to pain. This was the beginning of the discovery, and from this it spread through the civilized world, with an astonishing rapidity, and from all sources were promulgated most extravagant reports of its success.

In January 1847 ether inhalation was first used to controll the pains of parturition by J. Y. Simpson M. D., of Edinburg.

And in Paris during the same month by Dr Deschamps, and by Dubois at his Clinique Feby. 8th. In this Country first employed in parturition by Dr Kemp April 7th 1847. Thus it may be said that the use of ether in Midwifery spread over Europe and America in less than six months.

During the year 1847 Dr Simpson experimented with various agents with a view to find some substitute for ether, and was induced to prefer chloroform, and soon used it in a case of difficult labour with perfect success. Introduced to the notice of the profession by so distinguished

a person as Dr Simpson this agent was likely to supplant the ether, but a check was give to the use of this article in particular and anaesthetics in general by the occurrance of several cases of death reported from its use. Then anaesthetics began to loose ground as rapidly as they had gained it, but not all, for they continued to be used in many cases.

Different agents have been used as anaesthetics by way of inhalation, principally sulphuric ether chloroform, chloroform, and chloric ether. Ether is an artificial preparation, the product of alcohol and sulphuric acid distilled together.

Alcohol = $C_4 H_6 O_2$ = $C_4 H_5 O + HO$ = the hydrated oxide of ethel, the action of SO_3 upon this equals ether. Which purified by redistillation with a solution of potassa gives a limpid colourless fluid, specific gravity .7500, boiling point below 95°. It is extremely volatile and explosive in the air by ignition. It is a powerful excitent and if allowed to evaporate on an external part is vesicant. From this property has been used to produce local anaesthesia, and with success, by the Spirit aparatus of Dr Richardson. Chloroform. this is chemically different from ether, it is composed of $C_2 Cl_3 H$, and in chemical language is a terchloride

of Formyle. Was discovered by Guthrie of New York, Soubeiran and Liebig, about the same time, made by distilling together, water alcohol and chloride of lime. Boils at 140°. Sp. gr. 1.480, it is not inflamable. It is more powerful as an anaesthetic than ether in the proportion of eight to one. It is far less stimulating, and the stage of excitement is much shorter, if a full dose is administered this is scarcely perceptable generally, and the patient passes almost instantly into a sleep more or less profound.

This is now more ~~common~~ used than ~~chloroform~~ ether, its superior advantages are principally that it is far

more agreeable to inhale, and much less will produce anaesthesia.
Chloric ether equals 3 parts of ether 2 of chloroform and 1 of alcohol. The same general indications for its use as those of ether or chloroform. While lauding so highly the usefulness and value of anaesthetics, I would by no means recommend their indiscriminate use, for this as every thing else that is good may be abused. There are many ~~trifling~~ minor operations in which general anaesthesia is used in which it is much better to omit it, than to incur the slight risk, for some risk there is since well authenti-

cated case have been reported of death from its effects. Therefore when the end will not justify the means it is most judicious to omit this use, and discourage the patients timidity.

Besides this there are conditions of the system in which such powerful agents are contraindicated. Where there is great debility, disease of the heart, or Phthisis, it should be used cautiously. In bloody operations about the mouth, lest from the paralysis the reflex action of coughing should be prevented, and the patient suffer from suffocation. In operations upon the eye, lest vomiting be induced and with the straining the waters of the eye be forced out. This

is particularly dangerous after a full meal. Anstie says that chloroform with proper care, may be given to any patient who is in a condition fit for an operation, The one consideration he says, is the inhalation of an atmosphere composed of not more than three per cent of chloroform. The ordinary means of administering chloroform is on a handkerchief, made in funnel shape in order to allow the air to pass freely through. Then twenty or thirty drops are poured upon it and the handkerchief held about an inch from the face, while the patient should be encourage to take deep and full inspirations. Gradually consciousness is lost, next

comes muscular relaxation, and deep, perhaps stertorous breathing. Stop, now, and proceed with the operation, and when the patient revives give the chloroform again. And when it is desirable that the patient revive, let this be done without any confusion. Chloroform should never be used without carefully watching every respiratory act, and the finger constantly upon the pulse, In no other way can danger be entirely obviated, and not in this save by unremitting vigilance. Women in labour are generally in a better condition of health, than one about to undergo an operation, hence they are better prepared to resist the effects of the

agents. Ether possesses the power of relieving the pains of labour in great part or entirely, without stoping uterine contractions, unless the full anæsthesia be produced. But the only cases necessary for its full effects are where an operation is necessary. Best to employ it in last stage of labour, and in puerperal convulsion, In the third stage it not only deadens pains but relaxes the muscles, overcoming their resistance. The annihilation of pain and the avoidance of the nervous shock sometimes consequent upon to painful or to prolonged labours, and the facilitation of obstetrical manoeuvres are indispensible advantages to be gained from the use of chloroform

in this connection. These advantages are counterbalanced by some inconveniences. We should not, says Cazeaux, "for the simple object of sparing them some suffering, which they endure courageously deprive them of the caresses of the husband, and deaden the imagination already teaming with the joys of maternity, and the ineffable happiness of hearing the first cry of the newborn child."

A means by which to produce local anaesthesia has long been a subject of consideration. This has at last been successfully accomplished by the spirit aparatus of Dr. Richardson, which is now by many greatly extolled, as one of the great improvements in modern medicine. The object

of this is to produce local anæsthesia without effecting the whole system. This is effected by throwing a very fine spray of the very volatile ether, or what is better rigoline which is obtained from the redistolation of coal oil, upon the part desired tobe effected. In a few seconds the part becomes frozen, by the rapid volatilization of the liquid, abstracting heat from the part. Under the influence of these effects many severe operations have been rendered painless.

Though from my own observation of its employment, and success, I would not attach, to it the measure of importance, which I have had ascribed by other, and more competant critiques.

With this the latest contribution to anaesthesia I conclude my subject thesis, fully aware of its many defects, and the imperfect manner in which I have treated this, to comprehensive subject. I have no excuse to make of for its deficiency save what has been my fault, namely procrastinating this duty, until others are crowded upon me, which deprive me of the opportunity of devoting to it, the time I would have desire.

Hopeless of this production reflecting any credit upon myself, but hopeful that it may meet the requirements it is intended to fulfill; it is respectfully submitted.

Silas Baldwin

AN

Inaugural Dissertation

ON

Excrementitious Principles in the Causation of Disease

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Wm. Alex. Marbury

of

Maryland.

Session 1866—7.

Excrementitious Principles in the Causation of Disease.

To the Faculty:

Gentlemen:

I do not think it is easy to exaggerate the importance of this subject; for we can scarcely find in the catalogue of diseases a pathological state into which the human system may be thrown whose causation may not be traced to or found to be connected with a more or less excretory functional derangement. Indeed many abnormal conditions have for their sole cause and continuation the accumulation of substances no longer subservient to the needs of the system; while in other cases we may often trace the departure from health to

the effects of some alteration or modification of one or more of the elements out of which the different parts of the body are formed. And by whatever agent this condition may be brought about — whether in the form of miasmatic or venomous or poisonous matters — whether from the generation in excess of intrinsic morbid products — whether from the accumulation of excrements from functional derangement of the depurating organs — whether as the result of a constitutional predisposition or from the combined action of many modifying influences — by whichever of these means noxious elements enter or are generated in the system it is chiefly through the agency of the circulation that their effects are produced; and although, at this time, opinion seems to rest between the old theories of Hu-

moralism and Solidism, yet, if we except a limited number of local diseases, it is hardly possible to deny that there are few abnormal conditions which are not the result of some modification of the blood or of the blood making process. Reflecting how necessary for the working of the assimilating and of the Eliminating machinery is a right state and healthy constitution of the blood, and bearing in mind the conditions upon which depend a preservation of its crasis, we can readily appreciate the action of ever varying deleterious influences under which in the round of every day life the active individual must be necessarily brought. Following this assumption then of a change in the blood in most cases of disease, and adopting, to facilitate a consideration

of the subject, a classified arrangement somewhat in accordance with the one proposed by Dr Flint we have; Morbid conditions of the blood relating to its organized or corpuscular elements — to excess or deficiency of fibrine — to albumen — to the watery portion of the blood — to fat — to sugar — to the bilious elements — and morbid conditions due to the presence of intrinsic and extrinsic morbid products.

In the conditions of obesity and of plethora, in chlorosis and anaemia, we have apt illustrations of the morbid states relating to the organized or corpuscular elements of the blood; and in the state of Obesity, although the individual may not suffer beyond the mechanical inconvenience of an increased bulk, yet his state is far from being normal,

and the amount of adventitious mixed in with healthy tissue may fairly be ascribed to a comparative torpor of the eliminating organs by which certain excrementitious are allowed to accumulate and be deposited along with essential particles. Again in the opposite state of anaemia, whether arising from acute or chronic disease, consequent upon impaired digestion, loss of innervation and a weakened oxydating power of the circulating fluid, we find an accumulation of carbonaceous principles in the system and an inseperably connected state of functional derangement. True; Anaemia may arise from excessive haemorrhage or from loss of blood in any way, but it may not

exist for any length of time, nor may there be any diseased action going on in the system without impairing to a greater or less degree the functions by which alimentation and elimination are effected.

The conditions arising from an excess of the fibrinous element of the blood stand next in our order for consideration; and this is an important part of the subject; for, as between the coagulating power of the blood and its amount of fibrine there is a proportional ratio, at this day when opinion has swung round from a standpoint long accepted in the treatment of inflammatory disease, the fact, established by recent investigations, that the amount of fibrine increases

in proportion to the increasing attenuation of the blood, has had no little influence in bringing about this change." The size, form, and appearance of the clot, were formerly supposed to furnish very valuable pathological indications, and the treatment of disease was in a great measure based thereon" xxx "Valuable information may in some instances be derived from this source but less than was supposed before the process of coagulation was as well understood as it now is". Heart-clot, a pathological state which Dr Meigs claims to have been the first to notice and by which most sudden and otherwise mysterious and unaccountable deaths are explained, is set down as the result of the coagulating

power of this preponderating element. This is the most speedily fatal of any malady which may be thus induced, but other results may be traced to fibrin in excess which render serious affections not otherwise dangerous in their nature; and fibrinous depositions upon the valves at the centre of the circulation as a result of inflammation are striking illustrations.

We were informed by Prof. McSherry, in one of his lectures in connection with this subject, that these valves are most subject to calcareous and cartilagenous degenerations, and that it is so common for old persons to have these deposits that their generation can scarcely be called a pathological process. He also stated that it is believed that subjects of these valvular

lesions have at some previous period of their existence been the victims of one or more rheumatic attacks. Dr. Flint says "in some cases in which valvular lesions have not been preceded by rheumatism their point of departure may have been an endocarditis not rheumatic; for it is probable that non rheumatic endocarditis occurs not very infrequently when its existence is overlooked".
Some pathologists, in opposition to this, contend that endocarditis may not exist at all - the endocardium being a bloodless membrane. These nice points in pathology a student, however, can only give a passing glance, but if established by the adoption of a theory now offered additional evidence will be this

added to the views here sketched. Besides these conditions growing out of a combined and reciprocal action of fluid and solid there are morbid states more immediately connected with and dependant upon the state of the blood itself — conditions arising from the presence of an undue accumulation of substances preformed and preexisting in the healthy blood in certain essential proportions, now, from some functional derangement, being developed in undue quantity or being absorbed, after separation for excretion by their depurating organs. Thus, in Glycohaemia, says Dr. Flint, "the sugar in the renal blood increases the functional activity of the kidneys, acting like a diuretic, and hence the quantity of urine is greatly

increased": Also "that deficient excretion of urea occurs in acute inflammation of the kidneys, and under these circumstances, the urea accumulates in the blood and gives rise to the condition of uraemia". Further, in this connection, may be instanced in evidence the lithic and oxalic acid diatheses in the production of Calculi, several interesting cases of which Prof. Smith operated upon at the commencement of this course. These conditions says Erichsen "are usually dependant on slight disorder of the digestive organs and skin, coming and going under the influence of very trivial causes, generally occurring in individuals in whom there is deficient assimilation dependant upon exhausted

nervous energy, arising from over work, mental anxiety or venereal excesses." We were told by Prof. Smith that if these acids become developed in the urine in excess sufficient to originate a nucleous the natural amount always found in this fluid will, after the abnormal quantity becomes reduced, go on to increase by continuous deposits ~~deposits~~ the calculus thus formed and grown in the bladder.

From alterations in the amount of the water portion of the blood it is not less apparent, when we consider the offices of this constituent, that important diseased conditions may arise; for, said Prof. Donaldson, "Water holds the gases in solution; it dissolves the solids; and is a necessary element in that

ceaseless change of chemical composition and decomposition upon which life itself depends; and it is but necessary to mention the uncontrollable ravages of cholera which though taking its origin from a specific cause works, at least, a large share of influence on the system through the agency of the loss which it entails of its watery constituent; rendering the blood thick and viscid until with a livid skin, a cold surface, a diminished circulation, and an impeded respiration, death closes the sufferings of the poisoned and asphyxiated being. I might produce many other illustrations, and adduce in evidence further considerations, but the foregoing

are sufficient to demonstrate the connection I have sought to establish, or, if not this, the importance of the subject. I think has been shown; and I shall devote the remaining pages which I have allowed myself to a consideration in a general way of a few therapeutic indicatitions and agents with which we may meet some of these morbid conditions. "We have seen" says Dr. Dunglison "that amongst the most important circumstances which modify the indications of cure in disease and the mode of fulfilling those indications are age, sex, original conformation, habit, climate, mental affections, professions and way

of life, as well as the causes, period and seat of the disease; and all these have to be attended to in order that the Therapeutist may be enabled to administer his medicines with judgment and efficiency." Besides these modifying circumstances relating to the individual there are many others to be remembered which relate to the medicines, of which the forms and combinations in which they are administered are the most important.— As the agents in producing disease generally reach the system through the circulation so through this important channel are directed most of the agents which are employed to correct the diseased condition. "Were all the morbid

conditions of the blood fully understood", says Dr Flint, "there is reason to believe we should have the thread to guide us through the labarinth of pathology". But however, since many indeterminate blood changes must occur; since many conditions present themselves for which we can adduce no appreciable cause we must necessarily content ourselves by watching the progress of the malady, by meeting exigencies as they arise and by endeavouring to conduct the case to a safe termination. But even in pursuing this course we must often grope in the darkness of obscurity and follow the teachings of experience alone, and firmly reject, never regarding the source, what does not stand approved by

this infallible test. Thus Dr. Buckler phosphate of ammonia, in gout, although the theory upon which it was instituted has been disapproved by chemical analysis, has established its efficacy, while Garrods salts of potash, resting upon experimental researches, have been reported as totally useless.

The modus operandi of Peruvian bark, whose potent efficacy breaks the connecting link in the chain of periodic disease, has as yet never been satisfactorily determined, although it has maintained and ever will maintain in this connection a supremacy unapproachable. The recent experiments of Dr. Bence Jones are shaking the foundation of the old theory of an action of supercession upon which

its virtues were supposed to depend, and it is now thought to work its effects in the treatment of Intermittent fever by a process analogous to that of iron in conditions of the system left by low forms of disease, supplying to it some constituent which has been lost during the fermentation of the malarious poison in the blood. Iron, as a medicinal agent, is scarcely if at all second to bark, regarded simply as a specific, while the various diseases wherein its value is incontestible give it a prior claim to consideration. In many forms of Anaemia its action is as if magical, and in other cases, experience has pronounced in its favor where its precise mode of operation

is undetermined. Mercury is a powerful agent, which has stood the test of ages of searching inquiry, in the treatment and elimination of excrementitious principles from the system, and with blood letting and other antiphlogistics will ever, no doubt, be considered as indicated, under certain circumstances, in treating inflammatory disease. Emetics are an important class of agents whether we employ them to unload a distended stomach or for their revulsive or relaxing virtues; and I may mention the illustration they afford of the different effects produced by medicines according to the doses in which they are employed. Tartarized Antimony, which formerly stood at the head of this Class, is

now used principally for its secondary qualities, being superseded by agents less violent in their action. But besides these medicines proper there are laws of a simple character to be observed in the treatment of disease, and the attention to them is often sufficient to accomplish the objects of the medical art; and by disregarding the important requirements of Hygiene the most carefully considered medication will be often rendered fruitless.

"Without wishing," said Prof. Donaldson, in his opening lecture on digestion, "to detract from the efficacy of remedial agents, we cannot say too much for the powers of a proper alimentation".

Indeed many forms of food

have become a part of the Materia Medica, and classifications have been made by scientific men as an endeavour to meet the indications in disease. Besides these considerations a proper appreciation of the healing powers of nature will often cause us to pause in our efforts and employ patience, as a judicious measure, to meet the requirements of the case; and her achievements will sometimes astonish with results far outreaching the bounds of our previous conceptions, which if not humbling to medical pride teach the important lesson that "there is a destiny which shapes our ends rough

hew them as we may."

I am gentlemen, with feelings of great respect and high consideration, Your obedient servant,

Wm. Alex. Marbury.

AN

Inaugural Dissertation

ON

Scarlatina

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Thomas E. E. Magruder

Of

Prince Georges County Maryland

Session of 1861 - 1861

Croup

The nature is specific disease of a contagious character, generally accompanied by a membranous throat. It generally occurs in children, the greatest mortality from its tube obstructing. The third year. It usually assumes an epidemic form, and then may disappear for months. There are remarkable variations in the character of the disease, and in the symptoms which attend it, for instance, it may be so trifling, as not to interrupt the child's occupation, another day, in another case it is so severe as, and it proves so intense and, terrible in a few hours. Some deaths are [illegible]

[illegible] varieties Scarlatina Simplex, Scarlatina Anginosa, and Scarlatina Maligna. In the simple form, the patient experiences an attack of fever, very mild, of short duration, and accompanied by a bright-scarlet rash, with little or no sore throat. In the [illegible] form, the fever is more intense and the skin and throat are [illegible] affected. In the [illegible] form, the [illegible] upon the throat, and the fever [illegible] is great inflammation, and sometimes [illegible] are [illegible] conditions as the [illegible]

dreadful character of the malady.

Scarlatina was not recognized as a distinct disease till [illegible] [illegible] existed a long time after it had been confounded with ~~with~~ measles. Scarlatina was thought of by Sydenham, but was [illegible] it was the first to describe it as a new and specific disorder. That what is now called scarlatina, Sydenham, was the called the Tertian heat, the intensity of the fever with red eruption, has been established by late writers.

Measles may be distinguished from Scarlatina, 1st by the [illegible] rest of Catarrh [illegible] Time. Ruth

By the absence of [illegible]

[illegible]

is more elevated, and of a darker colour, and does not appear until the [illegible] tina comes out on the second,

[illegible]

coin is ushered in by nausea and vomiting generally, which are accompanied [illegible]

at. The rash appears at first
[illegible] on the face, neck
and chest, and then extends to the
trunk and extremities. It is of a
bright red colour. In some cases the
redness is uniform, but in others
it takes the form of irregular
and irregular blotches, which may
take a definite shape, and sometimes
even be slightly circumscribed.
For two or three days the rash
continues to become darker. It
then begins somewhat to fade
away, the skin at the same time
and the affected parts sometimes
desquamate, which causes desquamation to
[illegible]. The tongue is at first covered

[illegible]

As the eruption declines, the fire disappears from the lava, the redness from the stones, and a luminous corona surrounds the [illegible] from the hands and feet [illegible] until entirely [illegible]

The duration of Kind's fire is not in proportion to the abundance of the aliment but to the [illegible] of the eruption of the lava, which is the distinguishing feature of [illegible] fire.

[illegible]

[illegible]

[illegible] Thin [illegible]

[illegible] tongue with a white [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

and are sometimes covered with

a white secretion.

Sometimes the fever [illegible]

[illegible]

[illegible]

[illegible]

[illegible] ment of the [illegible]

[illegible] difficulty [illegible]

[illegible] swollen so much, as to block up the [illegible]

the entrance of the Pharynx, and rende

[illegible]

In some cases [illegible], coryza

comes on, and an adhesive yellowish matte

is [illegible] the [illegible] of the

nares, excoriating the skin of the up

per lip, which it runs over. The [illegible]

gland is [illegible] affected, and

cellular tissue of the neck is hard

and [illegible]. [illegible]

the [illegible] [illegible]

[illegible]

[illegible]

[illegible] the left side of the mouth, the palate on the affected side, the uvula, the eustachian canal, and [illegible] a painful tumor.

Case of Constitution. Sometimes the remedy favorable but when they do not the cheif cause of cold seems to be the disease arising from the difficult entrance of air into the patient's lungs. I see the lower opened and the local symptoms begin outside in three or four days. The sore throat comes on early in some patients and is often a great

severity, but is yet unaccompanied by the swelling of submaxillary glands, nor do the surrounding integuments acquire that tension or hardness which are seen in the latter case.

Between the severe forms of Scarlatina Anginosa and that still more dangerous of the disease called Scarlatina Maligna the differences are rather of degree than of kind, in the latter the throat symptoms are not constant. In Scarlatina Anginosa the dangerous character of the disease is not developed for several days, but in the malignant form the symptoms set in with such rapidity, and are so intense, as to cause the death of the patient in the first or second week.

affect the skin, and only for a few days appears only. This variety is attended with a feeble pulse, cold skin, and a great prostration of strength. The patient may sink suddenly. The chest is in its yellow crust, or may be ulcerated followed by the separation of the crust. The eruption deepens and still takes place about the fifth day, may be sooner or later as the third day.

The pulse is small and frequent and tongue is dry, brown and tremulous, yet with little, and dull pain. The heat is low, and nausea. In such cases nourishment is much bounded by little good.

A few cases occurred

of the [illegible] of the [illegible]
[illegible] of the Eustachian tube, becomes
deafness either by closing the tube, or
by destroying the membrane of the
[illegible], or the small bones of the ear.
Patients of scrofulous habit are subject to
sore throat, in such cases it is gen-
erally fatal. The tissues have
behind them, a longer train of early
symptoms the most frequent and disagree-
able sequelae are abscess which formed at
the glands of the neck. The discharge
of pus is accompanied by tumefaction of the
[illegible] and is sometimes followed by
[illegible] of hectic fever. Ozaena is another
result. It may also cause a
[illegible] inflammation of the joints, which

may result in anchylosis. But the [illegible] common [illegible] of [illegible] [illegible] inflammation of the [illegible] [illegible] more common after a mild, than a severe attack, and children are more liable to it than adults. Patients are more liable to dropsy during desquamation, the cause is supposed to be the premature exposure of the delicate skin to cold. The degree of fever follows it generally in the form of a [illegible], though [illegible] but [illegible] by [illegible]. A [illegible] from the head, or heartburn [illegible] disease is dangerous. The [illegible] or [illegible] and [illegible] [illegible]

This latter condition is often transient, the average ~~condition~~ duration being seven or five days. The specific gravity of the urine is usually high, and the quantity much increased. It is often a severe attack that is sometimes ~~of~~ of short duration, but may have recurred without being preceded by the usual symptoms of the disease, owing it is supposed to the susceptibility of the person and ~~the~~ its direct action on the ~~urine~~ on the kidneys. Jaundice is another frequent result of the disease which may prove obstinate, but ~~usually~~ usually yeilds to treatment. The stomach is sometimes affected and the patient passes into a state of

[illegible] also inflammation [illegible] angle of jaw, [illegible] spread to its [illegible] phalitis, pleurisy, [illegible] and bronchitis, the latter [illegible] as frequently after [illegible].

Post mortem appearances,

sometimes [illegible] the eruption under with [illegible] the body, and purple or [illegible] spots [illegible], the [illegible] [illegible] if the [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] inflamed [illegible]

ary canal also exhibits [illegible]

[illegible], the Kidneys are inflamed, also [illegible], the [illegible] of [illegible] may be [illegible] [illegible] are increased in number, the mucus membrane of bronchi, [illegible], [illegible] and trachea, is red and inflamed.

The substance of the heart and Kidneys is softer than natural, the heart is very flaccid and tears readily, it may be [illegible].

Causes

The causes of Scarlatina is [illegible]

[illegible]
[illegible]
[illegible]
[illegible]
differing [illegible] in its effect,
different axis, giving rise sometimes
to a mild and [illegible] form
of the disease, [illegible] of
an intermittent, and also a typhoid
character, or causing a [illegible]
direction as it [illegible]
in passages. There are a great
[illegible] susceptible to
the contagion of this [illegible],
which prevails at all seasons of
year. It may occur in the same
season but once, generally.
The [illegible]

[illegible]

Five weeks, on an average about
or five days.

Prognosis.

The result is very uncertain,
the mildest forms sometimes
assume the most deadly character,
Patients die when supposed to be
free from danger, while cases de-
cided to be [illegible]
in recovery. Even when the case
has reached ~~[illegible]~~ convalescence,
there is great danger from some
of the [illegible]

There are certain [illegible]
[illegible]
[illegible]

[illegible]

[illegible] to the

[illegible] consequence

[illegible] dangerous, at

least [illegible] of the

[illegible] such [illegible]

[illegible] Among [illegible]

[illegible] particular, on the other

[illegible] should be [illegible]

[illegible] when there is [illegible]

[illegible] of

[illegible] reasonable [illegible].

Among the [illegible] signs are a bluish

appearance of the skin, [illegible]

[illegible] of the [illegible] distension

[illegible] coma, [illegible] ecchymosis,

[illegible], [illegible], [illegible] or [illegible]

of the [illegible], [illegible] of the [illegible]

into the larynx, inflammation of internal organs, gangrene of the skin, and general prostration of the vital powers, feeble pulse, cold skin, and [illegible] death.

Treatment. The mortality among the disease requires but little interference. The best thing to be done is to keep the child in the house, in a well ventilated room, spare diet, and administer the remedies, turn the face of the child, observe the uptake of the fluid contents, [illegible] heat of skin. An injection of [illegible] for the bowels, [illegible]

[illegible]

[illegible] will not prevent [illegible]

[illegible] of the [illegible], During the [illegible]

[illegible] the [illegible] [illegible] [illegible]

[illegible] twice a day, but [illegible]

the [illegible] [illegible] day, once a day is

sufficient. However, while the Tetanus

[illegible], the patient should not allowed

to use his bed in the day, and [illegible]

[illegible] there were, the [illegible]

the time must be [illegible], and [illegible]

[illegible], and his hands should be

kept free. As yet the cuticle is recommended by some at the outset of the

disease. The cuticle [illegible]

[illegible] [illegible] [illegible], and [illegible]

[illegible] a few hours, a dose of castor oil should be administered, [illegible] [illegible] Where there is much [illegible] [illegible] [illegible] of the stomach, [illegible] of pain [illegible], the child should not go out when the air is cold for sometime after. Flannel should be worn next the skin, to prevent it. [illegible] sometimes, sometimes [illegible] Anisette tea [illegible], when such takes place, a cold affusion should be used, to the head, after all is over. If the pulse is strong and full, leeches behind the ears, or some blood may be drawn. The bowels should be kept open, by [illegible] [illegible] [illegible] should be [illegible] without [illegible]

of ammonia, the application of water in the high temperature. Cool sponging and [illegible] baths are good. Some preparation of ammonia if there be nervous symptoms; and if the action of the heart is frequent, to Digitalis. If the urine scanty, a diuretic, as the tincture of [illegible], or the [illegible]. If the patient is debilitated, and broken down, tonics should be resorted to, such as the sulphate of quinia and Huxham's Tinct. of Bark, are admirably adapted to this purpose. The throat should be carefully watched in every case, and when there is swelling of the tonsils, it should be gargled, with some demulcent fluid, as infusion of flaxseed, or slippery elm, or water acidulated with sulphuric or muriatic acid, or with vinegar. A weak solution of [illegible] acid or common salt, or a solution of

Sulphate of iron [illegible] the [illegible] applied to the ulcer with a camel's hair brush, but a solution of silver is also very good. Mercurial ointment mixed with hydriodate of potash should be tried in the [illegible] stage, the ulcerative [illegible] may be isolated by means of warmings, but this relief is very good and indeed, of the above [illegible] of [illegible] the following has been found very great in the severe form of [illegible] the [illegible].

The swelling of the glands of the neck should be treated by painting the part with the tincture of iodine, two or three times daily, the [illegible] should be applied, and the patient should be supported by [illegible] food [illegible] [illegible] [illegible] [illegible] [illegible]

this disease and be called by many terms, Nervous, Brain, Spinal, Epilepsy, &c. The topical agents should be treated by Rubefacients, Derivatives, Stimulants, &c.

Belladonna. It is very important for men and children to use Belladonna. Therefore when Belladonna was first used, it was thought a poison, but been found. Belladonna will cause a person to be unconscious of their existence upon which is not its peculiar powers in this disease. In great numbers it has served to avert persons from continuing upon the brink of a certain death. But the weighted

testimony in favor of its power as a prophylactic in this, it has been shown on two occasions, from the solution, drops of the extract of some aromatic infusion, and of the tincture, to a child one year old, and an additional drop for every additional year of the child's age. The half grain was divided into three doses, one of which twice a day to a child two years old, to older children three times a day. The sixteenth grain of calomel, with the same quantity of the yellow sulphuret of mercury, with a little sugar, has also been used as a prophylactic, but has been found to be of little use.

February 18th.

AN

Inaugural Dissertation

ON

Development of the Osseous System,

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Elbridge H. Gerry

of

York County, Pennsylvania

Session Fifty Ninth — 1866-67

Development of the Assay System, Mar.

When man surveys the works of nature, its adaptation of system to system, part to part, phenomena arise by which he may puzzle his imaginative and fanciful brain for ages to come, and yet be in mistery. Theories have sprung up and faded as if by magic, one man asserts another contradicts, and what have we gained simply doubt, anxiety and perplexity. With all this diversity of opinion among the Medical Profession, the Science of Medicine is slowly making inroads upon disease, and it is to be hoped, that the day is not far distant, when every disease shall yield to a speedy and successful treatment.

To accomplish this end every Physician should have a knowledge of the Anatomy of the human body and particularly, a knowledge of the Osseous System.

The body of every animal consists of various tissue, which are divided by Wilson into eighteen kinds and further resolved into four classes, "viz", simple fibre, homogenous membrane, cells and amorphous matter. Tissue has three properties physical, chemical and vital, the vital properties are assimilation contractility and sensibility. The animal structure is supposed to have its origin from a cell, and the cell is capable of being organized in the blastema, or in other words it originates in a mass of liquid matter. Cells multiply from a matrix or primative

cell, within the cell wall having a nucleus with a nucleolus, and each one is capable of development, being to not the daughters of the mother cell. In relation to each other, cells may be alone or connected together by an intermediate substance, as in cartilage and bone, these cells arrange themselves in rows and the substance around them hardens and vascular canals are formed, which concentrate to some point which is termed the "Punctum Ossificationis."

Bone is first soft and cartilaginous in the child and young of animals, but by age it becomes hardened, consisting of organic and inorganic matter combined, the animal matter gives to bone its elasticity, while the earthy matter gives solidity and hardness. Heat will remove

the animal matter and acids the earthy matter. The animal constituents of bone to earthy matter are in the ratio of one to two, they are said to differ in different parts of the body and hence no particular maximum can be obtained, youth and age make a material difference. Bone is a firm hard substance of a dull white color composing the skeleton of the higher order of animals it gives support and shields the softer parts and is the hardest substance of the animal body, having elasticity and toughness. Bone is composed of two portions, the compact or outside in texture like ivory and the cancellated, the compact consists of small fibres arranged in laminae and through these fibres the Haversian canals pass for the transmission of vessels into the cellular portion.

The cellular structure increases the volume and strength without the weight, and diminishes the effect of concussion. The cells communicate with each other and are occupied by medulla or marrow. The dark spots in the lamellae formed in circles around the canals of Haver are called lacunae and tubes connecting each other are called canaliculi, the communication of these carry the blood to every part and nourish it, the outside is preserved and nourished by a membrane called the periosteum and a medullary membrane on the inside of bone.

Bones are divided into three classes, long flat and irregular. long bones are levers and assist in the powers of locomotion, they are divided into shaft and two extremities.

The shaft is hollow for medulla canal, the walls being compact for strength, while the extremities are large having spongy tissue for muscular attachment and convenience in articulation. The bones are the clavicle, humerus, radius, ulna and meta-carpal bones, also, femur, tibia, fibula, meta-tarsal bones, and the phalanges. Flat bones are for extensive protection, these are the occipital, parietal, frontal, nasal, lacrymal, inner, scapula, osso innominata, sternum and ribs. Irregular bones, such are the temporal, sphenoid, ethmoid, sacrum, coccyx, vertebra hyoid, turbinated sup. and inf., maxillary, palate, carpus and tarsus.

Every bone has depressions, rough surfaces, eminences and a meatus for its nourishment,

these depressions and eminences may be classed, as articular and non articular. The eminences are tuberosities tubercles, ridges, lines and spines, the depressions are fissures, furrows, groves, notches and fossae, each used for a particular purpose.

The typical vertebra, consists according to "Prof." "Owen" of the Centrum around which are arranged four arches, superiorily, the neural arch, which encloses the neural axis, formed by a pair of neurapophysis and a neural spine, inferiorily, the haemal arch formed by a pair of haemapophysis and a haemal spine, and two lateral arches, bounded by the diapophysis and the parapophysis and completed by the pleurapophysis. The Centrum is the firmest of the elements and called the body.

The neural arches are found in every part of the vertebral column through which the neural axis passes and largely developed in the cranial segments. The haemal arches are generally deficient in the cervical and lumbar vertebra, except you take into consideration the soft parts, but in the dorsal vertebra they are very largely developed, the lateral arches being brought into connection so as to form the visceral cavity. The parts of the vertebra may be divided into elements and processes, the first consisting of the centrum, neural spine, neurapophysis, pleurapophysis haemapophysis and haemal spine, the other consists of the diapophysis, metapophysis, parapophysis, zygophysis, anapophysis, hypapophysis and epapophysis.

The bones of the human skeleton, are; according to "Gray", independent of the sessamoid, and wormian bones and teeth, two hundred and four and divided in the following order. bones of the trunk containing spine, pelvis and thorax, bones of the head containing cranium and face, bones of the upper and lower extremities. The spine extends from the head to the coccyx having several curvatures, resembling two pyramids joined together at their bases, the upper pyramid contains all except the sacrum and coccyx. The spine is composed of twenty six bones or as some term it, counting the sacrum and coccyx as seperate, in all thirty three which are termed vertebra, exclusive of those which form the skull as given by "Prof" Owen

which are four, occipital, parietal, frontal and nasal. The divisions of the vertebra are cervical, dorsal, lumbar, sacral and coccy-geal. seven in the first, twelve in the second, five in the third, five in the fourth and four in the last, the last two unite in the adult and form but two bones. A vertebra consists of a body and an arch, or seven processes and a spinal foramen, there are two pedicles and two laminae forming the arch, the pro-cesses are, four articular, two transverse and one spinous, these bodies are placed upon each oth-er, to give support to the head and trunk, the processes act as levers for muscles and assist in the protection of nerves. apertures are between these for to allow the nerves to pass from the cord. Several of the vertebra are peculiar of

these the Atlas and Axis, the first has neither body nor spinous process, the body being formed by the odontoid process of the Axis, which is a tooth like process and forms a pivot upon which the head rotates, the Atlas supports the head, processes and facets determine the peculiarities of the other vertebra. The sacrum and coccyx in the adult have nothing peculiar to distinguish their vertebra, as they are united into two bones for the support of the body and upper extremities with the aid of the ossa innominata or hip bones. The hip bones are similar shaped and divided into three parts for the sake of explanation, i.e. ilium, ischium and pubes, the ilium forms the prominence of the hip and the three unite in forming the acetabulum, in which the

head of the femur rotates. In the hip bones are notches, spines, foramina &c; these bones with the sacrum and coccyx form by their articulation the pelvis or basin, which is divided by the linea ilio pectineal line into true and false pelvis, all above the line is false and below true basin. There is a slight difference in the curvature of the coccyx in the sexes, the males being more curved.
Associated with the vertebra by articulation are the ribs, which are twenty four in number, twelve on each side anteriorly articulating with the sternum and forming the thorax, They are divided into true and false, the true ribs articulate with sternum, which is a curved bone resembling as "Gray" informs us an Ancient sword, to this the true ribs

are all but by means of cartilage, excepting the false five three of which are attached to the cartilage, while the last two are floating ribs. The thorax or chest is formed by the dorsal vertebra, ribs and sternum the costal cartilages unite the ribs to the sternum and give elasticity to the chest.

The superior expansion of the spinal column is the skull composed of twenty two bones, divided into bones of the cranium and face, of the former eight, of the latter fourteen. The bones of the cranium are occipital, two parietal, frontal, two temporal, sphenoid and ethmoid. The bones of the face are two nasal, two sup. maxillary, two lacrimal, two malar, two palate, two inf. turbinated, inner and inf. maxillary. The bones of the skull have depressions eminences and foramina, all for important

purposes also may be added sutures, fontanel's, cavities, and fissures. The cranium is for the protection of the brain and part of the nervous system. The skull is joined to the vertebral column, resting on the axis and atlas attached by means of ligaments.

The upper extremity bears a close relation to the lower and are termed the diverging appendages of the vertebra. The clavicle is a long bone lying along the upper and front part of the thorax articulating with the sternum and scapula.

The scapula or shoulder blade is a very important bone, situated on the back of the thorax from the second to the seventh rib. having borders, angles, fossas, processes and a spine, it articulates with the humerus in the glenoid cavity, the processes protect the cavity and soft

parts, while in connection with the muscles it gives symetry and roundness to the shoulder, the processes are called acromion and coracoid.
The humerus consists of a shaft and two extremities, reaching from the shoulder to the elbow, articulating at its upper extremity with the glenoid cavity of the scapula, this portion has two necks, the anatomical and surgical, with two tuberosities, a grove and ridge called the bicipital, the shaft has several ridges for attachment of muscles, the lower extremity articulates with the radius and ulna, having two depressions on one side and one on the other termed the coronal, radial and olecranon, it also has two condyles, they are the external and internal for attachment of muscles. The radius and ulna are two bones placed side by side constituting

the forearm, they articulate with the humerus at their upper extremity and with each other, having two processes, olecranon and coronoid, also two sigmoid cavities, with for the radius, a head, neck and tuberosity, the lower extremity of ulna articulates only with the radius having on the one side a process called the styloid.

The radius at its lower extremity articulates with the ulna and the bones of the carpus termed the scaphoid and semi-lunar, it has also a styloid process and a sigmoid cavity. The bones of the hand are divided into carpus, meta-carpus and phalanges, there are eight carpal bones named from their shape and arranged in two rows, the os-magnum is the largest and the pisiform the smallest. Meta-carpus consists of five bones each having a head, shaft and base.

Phalanges or finger contain three bones, the thumb two, these bones have a shaft and two extremities and are named, thumb, index finger, middle finger, ring finger and little finger.

The hyoid bone situated in the neck connected with the root of the tongue and a part of the larynx, has no articulation and consists of a body and four cornua, it is called the lingual bone, shaped like a horse shoe.

The lower extremit. is divided into femur, tibia, fibula, patella and bones of the foot, the femur is the longest bone of the human skeleton, reaching from the acetabulum to the knee, having a shaft and two extremities, the head articulates in the acetabulum of the os-innominata, the neck and tuberosities with the spiral

line are for important purposes, the linea aspera is a prominent crest having two lips and a rough space, this crest divides into three lines and two bifurcations, having a triangular space called the popliteal, the lower extremity has a fossa in front and a notch behind with two condyles, in the fossa plays the patella a large sesamoid bone, the articulation is with the tibia and patella. The patella is situated in the tendon of the quadriceps extensor and it is commonly called the knee pan or cap.

The tibia is placed on the inside of the leg commonly called the shin bone, the head is large and thick for articulating with the femur, it has a spine, external and internal tuberosity and a tubercle, on the external tuberosity is an articular facet for the head

of the fibula. The tendon of the patella is inserted into the tubercle in front. The fibula articulates with the tibia at the external tuberosity and has a styloid process. The inferior extremities articulates with each other and the astragalus, there are two maleoli, the external belonging to fibula and internal to tibia. The foot consists of tarsus meta-tarsus and falanges, the tarsus differs from the carpus in only having seven bones instead of eight, the os-calcis is the largest bone of the tarsus constituting the heel, in the posterior part of this bone is inserted the great Tendo Achillis.

The meta tarsus consists of five long bones in relation with the toes, there are five toes on each foot, consisting of three rows, with the exception of the great toe which like the thumb has but two. The sessamoid bones are small

round bones developed in the tendons that exert an amount of pressure upon parts over which the glide. The bones of the ear, as "Gray" gives them, are three, the malleus, incus and stapes, the malleus named from its resemblance to a hammer, the incus having its name from a resemblance to an anvil and stapes called from its resemblance to a stirrup.

The human subject has two different sets of teeth during life, the temporary and the permanent; the temporary teeth are twenty in number, in each jaw are four incisors, two canine and four molars, each tooth has a crown, a root and a neck, the permanent teeth are thirty two in number, four incisors two canine, four bicuspids and six molars in each jaw. The roots are firmly placed in the

avoli, the temporary or milk teeth are smaller than the permanent teeth, the ivory forms the main part of a tooth having enclosed a pulpy substance, consisting of pulp tubes, with walls called the dental tubuli. The enamel forms the exposed part of a tooth in a thin layer, the cortical substance is disposed as a thin layer on the roots of the teeth, from the enamel to the apex of the fang, "it contains sparingly the lacunae and canaliculi radiating from the side of the lacunae toward the outside membrane and the deeply placed dental tubuli".

In the skeleton, each of these bones as described are held together by means of ligaments and cartilage, forming according to the motion required peculiar articulations,

the motion in some are slight, in others almost in every direction. Some assert that it is not only ligaments and mem-branes that give motion to joints and hold the bones together, but that a cer-tain force is exerted externally, which is termed atmospheric pressure, it is demon-strated by attempting to ascend high mountains, and also, by a small perfora-tion into the articulation the bones will seperate.

When we compare the skeleton to man, we behold on the one side a hideous looking form complete in its structure while on the other is beauty, grandeur and magnificence combined, with the one, we associate death and the

grave, with the other health, life and activity. Now if the skeleton indicates death and man life, what makes this difference, it is the assistance of the soft parts, of these, I shall mention tendons and ligaments, muscles and fascia, arteries, veins, nerves, lymphatics membranes, the skin and its apendages and the viscera, also the different organs, 'ie' organs of sense, organs of digestion and their appendages, organs of circulation, organs of voice and respiration and the urinary and generative organs.

All these go to make up man, and with all of them, he is incomplete, there is one thing wanting and that is the "Soul" which shall live forever, though

The body may decay and all things else
may die immortality is the soul's birth-
right our spirits are children of the "Deity,
breathed by him into the nostrils of men
and partaken thus of "His Own" immor-
tal nature must live forever, wherever
man is found, there will be witness in-
numerable, declaring that the "Soul" is
immortal and that he is the TO KALON
of creation.

Elbridge H. Gerry. Pa.

AN

Inaugural Dissertation

ON

Urethral Stricture

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Lee Cotton

of

North Carolina

Session 1866-7

Veratrum Viride

Having my right as so much has already been written upon this subject, I scarcely know what more I can say; but in order that I may carry out my intention, she will first speak of its botanical history. American Hellebore is, I suppose, a native species of veratrum of this country, commonly known as swamp hellebore. It grows in all parts of the United States east of the Mississippi River in low and damp situations, its root is thick and [illegible] off numerous white branches. The stem large and very high, has leaves of a [illegible] green color, taste of a bitterish sweet; when taken in the mouth it creates a most acrid and burning sensation, and when swallowed the same effects are experienced in the stomach and

fances. Its virtues are obtained by macerating the root in water or alcohol. I will now [illegible] to confine myself to its physiological effects and therapeutic application. The pamphlet and essay without number have been written upon this humble member of the Pharmacopoeia, with opinions of different authors as different as the name and experience of each, so much so indeed it is almost discouraging to the medical student to undertake a subject the point of which has produced so many different theories. Veratrum viride is beyond doubt what I should call an arterial sedative, no matter whether that impression is first produced upon the nerves, and transmitted through them to the heart, the action of the heart or not the condition of the system and result is the same

Dr. Osgood & Stewart seem to be the scientific investigators of this peculiar drug, and to them is due the praise of its discovery, as much so as the inventor of the needle gun or the 40 lb Parrott. This drug when applied to the cuticle in its fresh state, it will produce irritation of the surface, and slight ulceration, in powder it is highly irritant to mucous membranes, when snuffed in the nostrils it produces violent sneezing and as I have before stated to most acrid and burning sensation in the mouth and fauces; when swallowed even a dose, it creates an alarmingly feeble pulse with great epigastric uneasiness, retching and vomiting, cold clammy skin, anxious expression of countenance, with all the concomitants of a collapse. Its effects on the pulse are most

remarkable and peculiar effect
reducing ~~them~~ from 80 to 35 or 40
in a minute. producing rapidly the
phenomena I have just described,
a pale cadaverous surface covered
with cold sweat, at the same time
the patient is affected with vertigo,
dimness of vision, dilated pupils, accom-
panied with stiffness of muscles,
with more or less involuntary actions.
This is especially so with the stomach
which organ frequently acts by
the voluntary contraction of its own
muscular coat independent of the
diaphragm. This peculiar effect upon
the stomach can only be accounted
for by the powerful influence of
the medicine. If such be the
nature of its action upon the
musculo nervous system, would it not
be an excellent remedy in tetanus?
Will not some practical experimentalist
inform us with some light upon

the subject. Though it reduces the pulse and controls the action of the heart almost at the will of the Physician, yet it excites the secretory functions more or less of every organ in the human organism, such as the kidneys, liver etc. It has been reported by most Physicians as a fact, that its action seldom, if ever purges. This is theory and not substantiated by facts. I have known it to produce purgation and also to quiet the action of simple cathartics, this is particularly so when given in extreme diseases. I must admit from what I have seen of its action, that there is a little disposition to a cathartic tendency in extreme cases attended ~~with~~ with high vascular excitement. From the earliest dawn of discovery in the medical science, it has ever been the case

when some new remedy of merit is discovered and given to the profession to indiscriminate use is the source of much deplorable disappointment. It invariably has been caused by want of reference to the Physiological effect and Pathological discrimination as to the curative powers of the medicine itself. Some eminent Physicians and among them Dr Horner of the Cincinnati Hospital — I mean were very much averse to the employment of Mercurials in pulmonary diseases. Thus I consider an uncalled for conclusion, and adverse to the development of scientific investigation. My Preceptor and myself have seen it exhibited time and again in the lowest stage of Typoid fever with beneficial results.

Nothing can be more detrimental to the medical science than a hasty

of practical knowledge and nerve in the application of such an important remedy in the treatment of diseases. Therefore I deem it not important and more than necessary for every medical student to first acquire sufficient confidence in himself and from practical experience in the remedies submitted to him of different authors, and his own personal experience in the practical treatment of disease, with them having acquired such confidence in himself and reduced theory to practice, with such in armor so he need not be startled by any newborn idea put forth in the treatment of human maladies. The striking effects of homeopathic upon the nervous and arterial system can be best appreciated by an incident related to me by a good old dog that the farmer of the entire

in order to protect their crops from birds and other fowls they steep the grain in an infusion of this root - the American Hellebore; soon after eating this grain the birds became incapable of running or flying as [illegible] exactly and [illegible] but if left undisturbed for any length of time they soon recover in a great measure from its poisoning effects and fly away. (Miller's Therapeutics Vol 3rd pg 247) the same effect can be produced upon the human system independent of nausea. Should the medicine be pushed too far so as to produce excessive nausea and vomiting with other deleterious symptoms. it can be readily counteracted by a small quantity of brandy, [illegible] of laudanum. [illegible] in [illegible] cases [illegible] rather alarming symptoms

and seem it wear off in course of a very short time without the effects of an antidote. The different members of the medical profession have written essays and expounded many doctrines relative to contagion, theories upon theories have been written concerning the profession upon this subject, each and every one of which has had its hour to stand upon the stage and its orators to praise it forth; but like all other subjects human as well as divine, there remains much to be learned of the modus operandi of vaccine in the treatment of different diseases. There is yet much more than can be written or experienced, though, humble student as I am in the cause, I must say let not the young student take every thing for granted which he

reads in Latin. There is yet in our noble science and profession far more to be learned, far more ground to be explored than has yet been gone over. That veratrum is an invaluable remedy in many diseases in proper hands, that its beneficial action is of inestimable service to the educated physician and of paramount importance to numerous patients I do believe. Yet I not think it to be a specific: I do not think it better than the Cancer in diseases when it cannot act like a charm were it the forerunner of the latter. Unhappily for the profession, professional men are too prone to ride hobbies, and ride them down, as in many instances with veratrum which like lime or water when improperly [illegible] is assuredly distructive as either, and when properly [illegible] perhaps

as great a good to the human race. When the Physician cut him loose or some launches out into some unknown sea and leaves behind him the great Chart laid down in the Materia Medica Medica the voice be sure to meet with shoals and breakers innumerable, and wreck his barge upon some unknown coast.

Next in order I propose to discuss its Therapeutic applications in the treatment of diseases. I have heretofore given it as to my opinion that the American Hellebore is an arterial sedative; there are many Authors that consider it possessing a nervous sedative. However [illegible] this may be it appears to me [illegible] that the nervous [illegible] of the drug is not exactly in unison with its most impressive effects upon

the human system, though true it may be that to a certain extent it harasses the circulation and quiet it seems to do so in many instances. Then if it be so powerfully sedative to the arterial system, surely its indications and applicability is plain to the intelligent student. If the above statement be true then it is especially effective in reducing the circulation when morbidly excited, and calming nervous irritations. Its use heretofore has been chiefly in the treatment of inflammatory fevers and nervous disorders, made of which, unless [illegible] excessive anaemic conditions [illegible] system it is an [illegible] remedy. It first [illegible] its celebrity in the treatment of Pneumonia, since which time [illegible] Physicians have used it indiscriminately in all inflammatory conditions of the

pulmonary and circulatory systems, but there are cases and conditions to be met, and its indiscriminate exhibition is to be deprecated by profession. Medicine is recommended by Dr. Osgood as a valuable remedy in treating acute rheumatism especially when combined with opium. I have not had an opportunity of seeing it administered in this disease therefore I cannot vouch for its efficacious effects. but if my above statement be true as to its effects upon inflammatory diseases I would not hesitate for a moment in resorting to the remedy.

AN

Inaugural Dissertation

ON

Vis Medicatrix Naturæ

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Geo. H. W. Jones

of

Maryland.

Session Fifty-Ninth 1866 & 67

Vis Medicatrix Naturæ.

In selecting this subject for my Thesis, I do not for a moment entertain a thought that, I, with my limited supply of practical knowledge of the Healing Art, can add aught, new or instructive. It however, being an incumbent duty on me, as a candidate for the Degree of Doctor of Medicine to write a dissertation upon something, relative to the Science of Medicine: I have chosen this in preference to any other without, indeed being able to give any assignable reason.

To apply therapeutically the best, the simplest, and less potent remedies of the Materia Medica, in such a way, as to alleviate suffering humanity of the many ills to which it is heir to,

has been the paramount duty and endeavor of the medical world, from the time of Æsculapius, to the present day. Legion and many indeed have been the theories, that have been proposed from time to time to bring about this end; some of which were as great of evil as of good, and though for a time, they would play a prominent part on the stage of Science; As research and study revealed more intimately the hidden mysteries of nature, some new theories would arise,—later from the older ones the polar, and though their votaries clung to them as tenaciously as does "fascia to muscle", they would ultimately have to succumb, yield to the pressure of opinion, and be thrown soll into insignificance.

Thus a constant change has been continually taking place, sometimes for the better, sometimes for the worse. It must however be conceded, amid the universal striving for improvement, that though the science has been, and is constantly changing, an advance, not a retrograde movement, has been the general order. Though these new theories were often of but little improvement on the older ones; they generally brought since new light to view, that was not known before: which of themselves may have been very insignificant, but when measured by the period, and the number of the laborers; it was something to have to record a positive gain, however small,

in a field of so much importance.
Step by step the science has been gradually advancing: until it has reached its present, but even now by no means its acme: Until the time has come when the hypothetical dogmas of the past, must give way to rapidly advancing Science. When speculative theories are not put forth and believed, but with them must bring their physiological proofs.—"the true basis of rational medicine". Indeed we may truly say, that the present knowledge of medicine is but an accumulation of facts, gathered through a long series of years.

Consequently it behooves every man who has taken upon himself, so important a duty as the endeavor to prolong Natural

life, and to lessen human suffering, while it lasts, to devote his whole life to the profession which teaches it, and to use every means in his power, without jeopardizing human life, to add some new light to that Science. "Nature reveals not her mysteries to the careless and inconsiderate observer."

I must, however confine myself more strictly to my subject. I began with the intention of making a few remarks on the Power of Nature in the cure of diseases.

It is believed now by many of the leading men in the profession, that in some of our gravest diseases, we can but assist dame Nature in eradicating them

from the system. That in many cases, we can no more cut short the disease,— but surely advancing enemy to human pleasure, when once he has a strong foothold, than can the dreading mariner stop the coming storm. We like he can act the true Captain to conduct our ship safely through, but often, we cannot do more.

It is an undeniable fact, that there are at present, but very few articles of the Materia Medica, that can be considered specifics, notwithstanding, our predecessors vaunted in almost every disease a specific; many of which are now known to be entirely inert, and many decidedly injurious in the several maladies in which they were

used: this then being done, it must be granted, that no one, whether physician or lay can positively assert, that he has made a radical cure with any drug, unless he knows it to be a specific in the disorder in which he has tried it. Time it may have brought about apparently very beneficial results. Every atom of it may have come up to his most sanguine expectations, from day to day under its influence he sees the poison of the disease being gradually eliminated from the system, and soon a cure is made, as he thinks, by his drug. If however he again tries the same remedy in a similar disorder and it fails, he cannot say with any degree of certainty

that is cured in the first case. No doubt it greatly assisted nature to throw off the poison sooner than she would, without its aid. Do not by this believe, that I for a moment doubt the efficacy of medicine in diseases. We have I am thankful to say a complete control over some of our most common diseases by the specifics which we possess. Among these we may name the several forms of Malarial fevers - particularly the intermittent type - which nature alone, would be often weeks, months nay even years eliminating from the system; can almost invariably be cured by Quinine and its salts in a very short time. Variola - which formerly carried off, according

to statistics nearly one fifth of the inhabitants of the whole world; let continue, can now be greatly mitigated and often entirely prevented by Vaccination. Trichinia can generally be cured by Tannin. I could go on and add several others to my list. Besides our specifics, we undoubtedly possess many Medicines, which have a very powerful beneficial influence over diseases; and many which have the power of sustaining the vital powers until Nature can cure. Admitting them all of this, I must at the same time assert, that I believe there exists, in the minds of some of the members of the profession, - especially those of the old school - who

believe there is a specific for almost every disorder, and still more strongly, and almost universally in the minds of the public, a most unjust appreciation of the extent of a peculiar healing power, the vis Medicatrix Naturæ, a power sui generis, with which every living thing of the animal, as well as the vegetable Kingdom is possessed and endowed with.

That there is such a Power in every living body over which man has no control, it is our business now to prove. Let us then in the first place search for it, in those fields, where it will be furnished with the greatest purity. Among the first proofs that occur to our minds, is the vast field furnished

to us by the pathology of the inferior animals. It is an undeniable fact that all of our domestic animals are liable to, and are often afflicted with, various diseases, and that they get well without any medication. The Veterinary Surgeon even goes so far as to assert, that the horse is heir to, almost every disease with but one or two exceptions, to which man is. Whether this be so or not, we do know that he is often sick, and that when unaided, often cures. True aid is often brought in, in such cases, but in those only in which Science added nothing to the cure, do I wish to adduce as evidence in my favor. Again, let us seek the wild animals in their haunts. Though we know but little

of their diseases or their results. We do know that punctured and incised wounds, of the most frightful character, inflicted by the hunter often healed by the natural process. Limbs are often broken ossification takes place, the bones are united and often without any deformity, as is proved by the examination of their bodies, when afterwards killed by the Sportsman.

It is known that animals as well as men are often visited by epidemics and that many that are afflicted with the pestilence do not die. Even if these cases are few and sporadic, the few cases must be attributed to the Vis Medicatrix Naturæ.

In thus producing evidence from the inferior animals in favor of the natural cure of disorders in man; I have no doubt it will be regarded as analogical and deductive, not as certain and real. The analogy is however so close, that we cannot hesitate to draw the inference, and to believe that the same natural changes would take place in man. That there is such a power in man as well as beasts indeed none, but the most credulous minds will doubt. It is made palpable to our senses as an every day occurrence. The diseases in beasts offer a much better evidence in our favor

for that the natural cure take place uninfluenced by joy, grief, fear, hope or distrust in the treatment.
Every physician who has had any experience at all, has seen the influence that confidence or distrust in remedies has over the minds of patients. Has seen remedies used which brought about no beneficial results, while the same remedies, given by a physician in whom the patient had unbounded confidence, produce a most desired effect. I have myself seen the imagination wrought up to such a height, that a placebo produced the same action as a

cathartic, — In the case of a Mrs Dove — thanks to the Infirmary for this information, — upon whom a Fowl pie caused a copious evacuation, in a few moments, while without she would be constipated for days.

The right field in which we will seek for evidence, will be one, which is migatory and impartial but obvious and positive.

The opinions of travellers furnish us with the fact, that though most savage nations from natural instinct seek relief from suffering, and believing this relief not to be an inherent power within themselves

has given rise to a kind of Medical
[illegible] In many [illegible] times, this
art is of such a nature, that it may
[illegible] [illegible] [illegible],
if they are made but seldom,
to the "Vis medicatrix Naturæ" aided
by the imaginary powers.
Among the Tonga Islands ac-
cording to Mariners, their whole
Medical treatment consists of in-
[illegible] and [illegible] [illegible]
[illegible]. [illegible] the cure makes
[illegible] even if they be [illegible] so far
must be said to be Natural.
[illegible] [illegible] [illegible] fact
that among half civilized nations a kind
of pestilence or plague [illegible]

witchcraft has always existed.
Even a part of our once happy Country did not escape the foul contamination, when civilization was diffused over the whole land.- History tells us that among the earlier settlers of New England, it was practiced to such an extent by old women, not only in pretending to cure diseases, but in bringing on such fearful imaginary disorders, that the State authorities had to prohibit by law its further practice. In many parts of Africa at the present day this witchcraft is believed to play a most extensive part, both in causing and curing diseases. It of course has no power in producing any except

imaginary disorders; But that they are subject to the same maladies, that other tropical nations are is well known; and we have every reason to believe that they are not always fatal;- Since their average age seems to be as great, as that of most nations. More of course must be fatal and their diseases are more prolonged, than they would be under proper medication. Still the number that survive however small, under the practice of such an hallucination must be only nature's cures.

Even these supernatural interferences with the workings of nature were not practiced to a very great extent, among imperfectly civilized nations in ancient

times. We learn that among the Romans for ages after they became a civilized nation, the Medical Science was virtually unknown to them, being practiced only by a few priests and divines, and these were looked upon by the populace with indifference and distrust. Even in the time of Pliny physicians must have been looked upon, more as a nuisance than a use - when he speaks thus of them. "Discunt periculis nostris et per experimenta mortis agunt"
Nay even now in our own land, while the cities have a superfluity of Doctors; in some country places, particularly the far West, - where the habitations are so very scattered, - physicians being

such a great distance from their homes,- they may virtually be said to have no medical advice.- Having to depend almost entirely on the old women of their household;- whose sole treatment consists of cordials, herb-teas and infusions of various kinds, made from the vegetables of their own vicinity: Many of which are entirely inert in the several disorders in which they are used. And though under such management, persons no doubt die, who might recover under a better treatment; still after prolonged illness, many do, from very severe attacks recover;- Here again we must maintain that it is nature's autocracy. There is another source of evidence in

our fare more circumscribed, but at the same time not less authentic: derived from the history of isolated bodies of men, whom adverse fate has thrown far from their homes and human aid.- Who have been attacked with the severest fevers, under the most unpromising circumstances of regimen, climate, and shelter,- far from any medical aid or assistance, upon barren coasts, or where alone the savage rules with "undisputed sway". Yet under all these adverse circumstances; the story of the shipwrecked Mariner tells us that they often survive and after long suffering and privation return home to tell their sad tales. The history of our merchantmen teach the same facts.

Let us now leave the domain of legitimate medicine, and we will find an ample field for gathering evidence: in the proceedings of the numerous Quacks; who are to be found in every age and every Country. That a large proportion of persons in every community intrust themselves when sick to the exclusive operation or nonoperation of advertised quack medicines is well known to everyone, and that many on the administration of the so called remedies; which are advertised to be panacea in every human ill whether of mind or body, do recover from their diseases under every form of medication whether mild or drastic is an undeniable fact.

Besides the Quack, there is an other set

of nuisances, who infest all of our large cities: who furnish us, with more direct examples of Nature's Power in curing disease. Indeed no records of Medicine can supply, as it falls, so strong in point of force and extent, as that furnished by the school, known by the name of, Homoeopathy. Since the establishment of this practice by Hahneman, now, I believe upwards of fifty years, a large number of most civilized nations have been treated, according to its precepts and practices. That is treated nominally by drugs, but actually left to Nature's cure aided by the imagination. Though the votaries of this School have ingeniously tried to make their theories plausible, it must be actually believed as a doctrine of general

application, and in the pretended, practical, principle, not only unphilosophical, but impossible. Every one who knows any thing of the therapeutical action of medicine: knows, that the prescribing, of such infinitesimally small doses, or in other words of imaginary doses of medicine, must know that they are utterly incapable of producing any change in the animal organism, except through the medium of the imagination. Then we have an undisputed right to assume, that all the cures exhibited in the practice of the Homoeopathists, are the product of nature, aided by the patients confidence in his professed medical adviser. I must however confess that I am not such an advocate of the inherent power in nature to cure diseases, as to believe that the practice

of the Homœopathists are honest men, but believe that they have circulated, the report of their giving no Calomel, no Tart, and no Mat. and such infinitesimally small doses, for mercenary purposes. Only to work on the minds of the public, whom they know to be naturally very credulous. I believe the earlier followers of Hahneman embraced his teachings from conscientious motives, and followed his practice from the same benevolent desire to benefit mankind, that actuates the followers of the ordinary system of medicine. But p[illegible] n the very condition of things, we must infer, now that their doctrines have become so wide spread, and with them their practice, so that they get a reasonable proportion of t[illegible] patients of our large cities. If the mortality w[illegible] much

greater than in the regular course of Nature, the public would cry out in outcry against them. I say with these circumstances we cannot obtain as much in Nature's cure, but must infer, that they infringe on the Allopathists and give unsuitable doses of medicine.

I hope in the preceding pages I have been able to prove satisfactorily that there is an inherent Power in every living body capable of curing many of our curable diseases, if given its own time, without the aid of Science. Unquestionably science has been to greatly facilitate and rendered much more rapid

in every case by the appliances of proper medicine for either in the surgical or medical form.

The basis—if any there be—to be drawn from these conclusions is this. That the science and art of hygiene, when faithfully and deliberately practised with the intention of assisting nature to throw off the poison of disease is often, just as long sufficient of the most beneficial results. The idea that diseases of every kind, can be raked out as it were through the alimentary canal, by drastic purges or drawn from the arm in bleeding and with the total thing is erroneous and false; Alice such was the belief among many of the

most learned medical professors until very recently. Indeed I must say that I am of the conviction, that the antiphlogistic treatment carried to the extent it formerly was, particularly in asthmic disease was malpractice and often caused long and lingering maladies.

In conclusion my honored professors I submit the foregoing to your perusal, and anxiously await the day when we shall meet in the Green Room. Where upon my final examination you shall decide, whether I am worthy of continuing the study of that most beautiful and noble Science—Medicine. Whatever that result may be, permit me to say I shall in after years lay musing with pleasing thoughts of the pleasant hours I have spent while listening to your lectures.

February 11th/67 Geo. H. Jones.

AN

Inaugural Dissertation

ON

Respiration

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Alvard White

Of

Maryland

Session of 1866 – 67

In making choice of the subject for this essay we have been actuated more by a just appreciation of our attainments, than by a desire to gratify that natural longing which we think belongs to us all, for those hidden parts of the science which admit only of crude conjecture and hypothesis; the discussion of which had much better be left to those who from long years of experience and observation are better fitted to draw just conclusions. Numerous diseases fall within this category, from the apparently trivial though sometimes obstinate intermittent

of whose cause we are ignorant; yet which we can by the likewise incomprehensible powers of cinchona quell at pleasure; to the wretch stricken with epileptiform convulsions, over which medicine has little if any control. Such subjects as these it is to which we not unfrequently find our attention directed in glancing over the compilations of aspiring youths, on whom have devolved the duty of composing an acceptable thesis before they can obtain the much coveted degree of Doctor of Medicine. But would it not be better to leave these

vexed questions to the arbitrament of older and wiser minds, confining ourselves to the discussion of those questions which they by their untiring efforts have settled beyond dispute? We think that it would, since we can but at best echo the teachings of others.

We define respiration to be that process by which the system gains oxygen, and parts with carbonic acid gas. The great importance of this function is made manifest by the fact, that it is only when stimulated by duly arterialized blood that the left cavities of the heart are induced to propel properly their contents. There exists between the three great viscera on which life depends a mutual dependence. The brain deprived of its due supply of oxygenated blood fails to exercise its accustomed power; consequent upon this, and following each other in

quick succession, we have stoppage of all those vital acts which go to make up life

The organs concerned in the process of respiration are, to say nothing of the nasal passages. The larynx, consisting of a number of cartilages arranged in an hour glass form. There have attached to them the various ligaments, and muscles, which beside regulating the column of air, form the vocal apparatus. Situated within the larynx is the glottis, which consists of a constriction of its walls caused by the false and

true vocal chords. Above we have the epiglottis, attached by one extremity to the receding angle of the thyroid cartilages, and projecting thence over the superior opening of the larynx serving as a means of protection against the entrance of food or other foreign matters into the air passages. The larynx recieves nerves from four different sources, from the facial, from the spinal accessory, from the hypoglossal, and from the pneumogastric. The trachea, which is the continuation of the larynx downward is about four inches in length, and extends

from opposite the fifth cervical vertebra, to the third dorsal, where it divides into the right and left bronchus; these enter the lungs and divide and subdivide, ramifying throughout their entire structure. The trachea is composed of a series of cartilaginous rings fifteen or twenty in number, extending around the anterior two thirds of its circumference but being deficient at its posterior third; they are connected with each other by a membrane of fibrous tissue which also forms the posterior boundary of the tube. The lungs are two con-

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-ical organs situated one at each side of the chest, and separated from each other by the heart and mediastinum. They differ somewhat in size and form; the right being the larger, and being divided into three lobes, while the left has but two. In structure they consist of the minute ramifications of the bronchial tubes, which terminate in intercellular passages and air cells. Of the ramifications of the pulmonary arteries and veins; the bronchial ~~arteries~~ arteries and veins; of nerves and lymphatics this network of vessels and

nerves connected by areolar tissue constitutes the parenchyma of the lung; which upon examination is found to be divided into numerous small lobes connected together by an interlobular areolar tissue. These lobes again are divided into smaller lobules, each of which is composed of a cluster of air cells, in the parieties of which the capillaries of the lungs are distributed. Each little lobe is supplied with its own bronchial tube and capillary. The lungs are supplied with nerves from the pneumogastric

and sympathetic. The movements of respiration may be divided into two classes; those of expiration, and those of inspiration. The first of these is a mere passive movement, produced by collapse of the walls of the chest. It is by this movement that the air contained in the lungs, and which has received from the blood a certain amount of excrementitious matter is expelled. The act of inspiration differs from the above in being an active movement, which however is rather automatic than otherwise, being only to a limited extent under the control

of the will. The principal muscles concerned in these movements are the diaphragm, and the intercostals, aided by the scaleni, the levatores costarum, and the serratus posticus inferior. By the contraction of these the cavity of the thorax is enlarged; laterally by the action of the intercostals, and in length by the downward contraction of the diaphragm. Immediately upon this dilitation taking place the air rushes in to fill the vacuum thus produced; penetrating the bronchial tubes throughout their entire length.

We have next to consider the nature of the changes produced, first in the blood, and secondly in the air by respiration. We find that the blood has changed in color while passing through the lungs from venous to arterial, and that it has lost carbonic acid, and gained oxygen, and beside these which are the most important changes it gives of a quantity of watery vapor, and some organic matter. If now we turn to the air which has been exhaled we will find that it has lost about five per cent of its oxygen, and has recieved from the blood carbonic acid and other

impurities. This interchange of gases is a simple phenomenon of absorption and exhalation; since the oxygen does not as was formerly supposed unite with the carbon in the lungs to form carbonic acid. The process of respiration as at present understood, is effected in the following manner. The blood reaches the lungs charged with carbonic acid, in passing through the capillaries it is brought in contact with the air contained in the pulmonary cells, and an interchange of gases there takes place, oxygen passing in, and carbonic acid passing out. All the carbonic acid

contained in the blood is not given off. This has been shown by Magendie, who found that oxygen and carbonic acid existed in arterial blood in the porportion of ten of the former to twenty five of the latter; while in venous blood they exist in the porportion of ten of oxygen to forty of carbonic acid. We have next to consider the source from which the carbonic acid is derived It was supposed by Lavisier that it was the result of chemical action taking place in the lungs; resulting in the union of the oxygen of the air with the carbon ~~acid~~ of the blood. That this explanation was not correct was soon

shown by the fact that the acid existed ready formed in the blood. It was then thought that it was produced in the capillaries of the general circulation, of this however there is no proof. Physiologists of the present day recognize three sources from which it is derived. The first of these is the lungs; where it is produced by the decomposition of the alkaline carbonates, by the pneumic acid there present secondly in the blood, where we may with reason conclude that it is formed, since this fluid is like the solids of the body made up of principles, which to retain their

vitality must undergo metamorphosis; one of the results of which is the evolution of carbonic acid. Thirdly it is derived from the tissues which give off much more than both the other sources combined. Experiments performed by numerous persons show that all tissue wherein a recent state gives off carbonic acid gas, and takes up oxygen; they likewise show that this exhalation of carbonic acid gas is not dependent upon the presence of oxygen, since a very much larger amount is given off in a stated period

when the tissue experimented upon is surrounded by an atmosphere of hydrogen, than when exposed to the air. In the former the amount being 4.07 grains; in the latter only 1.13 grains. From these facts we conclude that the carbonic acid given off during respiration cannot be, either the product of oxidation or combustion. On the contrary there is every reason for believing, that it results from the retrograde metamorphosis, a process which is constantly going on in every organized body. A familiar example of such change taking place

between the elements of a compound body, is seen in the decomposition of sugar, where we find the elements resolving themselves into alcohol, and carbonic acid. The carbonic acid thus formed in the tissues is taken up by the blood; part combines with the alkaline bases there present to form carbonates, which as we have seen are decomposed on reaching the lungs, by the pulmonic acid. The remainder is carried onward in a free state to the lungs to be thrown off. The quantity of carbonic acid given off daily varies with the individual. An adult man in good

health exhales nearly 1150 cubic inches per hour, or 15 cubic feet per day. Age and sex influence the amount in a marked degree. Thus it has been found that while a boy of eight years exhales but 564 cubic inches per hour, one of fifteen years exhales 981 in the same time. In males the quantity given off continues to increase until the twenty-fifth year, it then remains stationary for a period of ten or fifteen years, then decreases in amount as age advances. The female exhales at all times a smaller quantity than the male, and it ceases to increase when they

arrive at the age of puberty; it then remains stationary until the cessation of the menses, when it again increases in amount till about the fiftieth year; when it gradually diminishes as in the male, with increasing years. The amount varies with the health of the individual, being greatest in those who are in robust condition, with largely developed muscular systems. During the period of pregnancy the amount given off is largely increased; equalling in amount that of women who have passed the menstrual

period. The amount of oxygen consumed during the twenty four hours is according to the statement of Regnault about seventeen and a half cubic feet. The different articles of food also influence the amount of carbonic acid given off; thus all nitrogenous substances tend to increase the amount, while the carbonaceous lessen it, in as marked a degree. Alcohol in all its forms tends to lessen the amount; to this there is one exception in the case of rum, which from some cause increases the amount of exhalation

The blood recives about five per cent of the oxygen contained in the inspired air, hence we require three hundred cubic feet of pure air during the twenty four hours, but as there are many impurities in most air contained within doors, physiologists consider that each individual should have at least eight hundred cubic feet; and in hospitals where there are constantly acting many causes which render the air impure, the amount for each individual should be 2500 feet.

The quantity of watery vapor exhaled amounts to about one and one sixth pounds daily. The extent of surface exposed to contact with the air is a subject of some little interest, as it is only by a just appreciation of it, that we can understand the facility with which the blood is enabled to free itself of its noxious properties; and in return imbibe the vivifying element. Lieberkuhn has estimated this to be about 1400 square feet. The air consumed in respiration may be arranged under four heads. The tidal or that which passes in

and out at each movement; amounting to 26 cubic inches; the residual, that which remains in the lungs after expiration, amounting to 100 cubic inches; the reserve which is all that is taken in during inspiration, but of which only a part is given off; it amounts to 100 cubic inches; the complimentary air or all that can be taken in and given off at a forced respiratory movement amounts to 100 cubic inches. The lungs are not the only organs concerned in respiration, the whole cutaneous surface takes part in this important process.

AN

Inaugural Dissertation

ON

Typhoid Fever.

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Josiah B. B. Wilson.

of

Maryland

Session Fifty-ninth 1867

Typhoid Fever.

This is a variety or form of Continued fever, extremely prostrating in its character, closely allied to Typhus Fever, and, like Typhus, tends to death by lowering the vital capacity of the patient in a modified degree. It will sometimes be found difficult to diagnose between Typhoid and several other kinds of fever - such as Enteric, Gastric, Gastrointestinal and Bilous fevers. Indeed Enteric fever is synonymous with Typhoid. In this disease there is tenderness and gurgling in the right iliac region; the intestinal follicles, mesenteric, and the glands of

Peyer are almost always diseased. The locality in which disease is almost universally found, is two or three feet of the lower part of the ilium; the mucous membrane is affected, and around Peyer's glands it is raised up and very soft. Typhoid matter is deposited in the above mentioned glands; they may be ulcerated or thickened without ulceration. The mesenteric glands are sometimes found containing pus. If the patient die as early as the ninth or tenth day, there is frequently no ulceration; but the mucous

membrane around the glands of Peyer is frequently very much softened. The Spleen, too, is almost invariably found very much softened, - sometimes entirely disintegrated. The Kidneys are also frequently softened; the lower lobes of the lungs are frequently congested; the blood is very much altered; the fibrin is diminished, and the globules appear broken down. The brain and medulla spinalis do not generally present any morbid appearances. Children generally die before ulceration takes place, sometimes in adults the intestines are ulcerated through into the cavity of the peritoneum.

The morbid poison of this fever first produces general disturbance of the system, then the intestinal glands become affected. Generally when this disease is making its approach, there is a feeling of malaise for three or four days; then there is a chill, headache, accompanied with a feeling of great debility. This disease may be divided into three stages, each stage continuing seven days. In the first stage after the general feeling of malaise, there is diarrhoea. The stools are thin, and there may be twenty or thirty a day, or there may be only one. Violent

headache comes on, frequently epistaxis, an expression of prostration, the senses obtunded, sometimes slight delirium and vertigo. In this stage there is rapid emaciation, dorsal decubitus, anorexia, tympanitic abdomen and tenderness over the epigastrium, with hot and dry skin, suffused eyes, pulse decrotic and over one hundred, glutinous visid sputa, cough, sometimes sibilant and sonorous ronchus. About the seventh or ninth day an eruption of rosy red spots make their appearance, in number from half dozen to a dozen, on the anterior

part of the abdomen. There may be several successive crops of these spots. Sometimes thirty days elapse before they appear, and in mild cases they may not appear at all. In the second stage headache diminishes and is replaced by giddiness, more debility, convulsions, delirium, and sometimes coma; the tongue is coated, tremulous, and redened at the tip, the lips covered with a brownish crust, the thirst becomes less, which is unfavorable. Dysphagia and dyspnoea, not unfrequently in this stage, which may be caused

by gas forcing up the diaphragm. Diarrhoea goes on, ulceration takes place, involuntary stools and distention of the bladder. The pulse, ranging from one hundred and twenty to one hundred and forty, may fall to sixty strokes, which wide difference may be due to morbid heat produced by ulceration of the intestines. This sudden falling of the pulse is an exceedingly unfavorable symptom And demands great promptness and vigilance on the part of the attendant. From the Sixteenth to the Twentieth day a miliary

eruption appears on the groins and in the axillae, - they are called sudamina, - each contains a little water. Bed sores and sloughing sometimes occur in protracted cases, which are rarely, or never met with in rural districts where the fever runs its usual course. Typhoid fever attacks all classes and ages of individuals; but as it seems to attack persons under the age of thirty in a much greater proportion than it does persons above that age, it is but reasonable to conclude, that persons under the age of thirty years are much

more liable, and that age, up to the above mentioned period, may be considered a predisposing cause of the disease. This disease generally manifests its self in persons exposed to the atmosphere of low marshy countries, and localities subject to inundations and deposits of sediment and vegetable matter. Indeed it prevails so abundantly in almost all low countries, filthy localities of crowded cities, and badly ventilated buildings, that it would appear obvious, not

only to the physician, but to the casual observer, that these unhappy circumstances act as exciting causes and frequently give rise to the disease. But on the other hand, if all fevers depend upon the rapid disintegration of the tissue of the body, it is plain that Typhoid fever may occur without predisposing or exciting causes. For individuals who are not exposed to Malaria, and who have passed the predisposing meridian of life, do sometimes have fever; and as it is due

to the too rapid waste of tissue, there is no reason why it should not be Typhoid fever. If, then, it is Typhoid, to what cause should it be referred?
It may be referred to the cause from which so many human maladies arise; namely:- the violation of the laws of hygiene. The origin of this disease can be traced to the lower intestines, but whatever may be the real cause, it is difficult to say. The treatment of this disease appears to be simple. Strict attention should first be paid to the hygienic

regulations of the patient.
Absolute rest in a well venti=
lated room, nourishment
from the first onset of the fever,
nitrogenized food, such as
animal broths. Of medicine
this disease does not require
much; an emetic the first
week, and mild aperients
may be of great service.
But Sulphate of Quinine,
Alcohol, Chlorate of Potassa,
Oil of Terpentine, and Opium,
may be considered the most
valuable medicinal agents.
It would be useless to attempt to
mention a course of treatment

to be pursued in Typhoid fever. What is best to be done, and all that can be done, is to treat the symptoms as they arrise; for the fever cannot be arrested in its course by any medicine, or mode of treatment; and as it is also liable to variation of type, the treatment which succeeds best one year, may not be successful the following.

The general prognosis of the disease is favorable. The temperature of the body, tried from time to time, furnishes a very valuable

prognosis, although it is very fluctuating through the entire course. But when the normal temperature is reached, which is generally between the fifteenth and twenty-first day in mild cases, and the patient does not show signs of improvement the prognosis is unfavorable.

Respectfully

Josiah B. B. Wilson