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.

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UNIVERSITY OF MARYLAND

THESES

1864 (a)

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[1] Noteworthy title page calligraphy in color. Full page color illustrations: patient with unidentified skin disease and skeleton representing death with hour glass at the foot of his bed; patient with bloated body in a reclining position.

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	Notes
Weems, Julius B.	Report of Six Cases	
Mehring, A. Buffington	Scarlatina	
Esgate, John	Pneumonia	

UNIVERSITY OF MARYLAND

THESES

1864 (a)

Gordon, Basil F.	Aneurism	22p.
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1864

(Basil T. Gordon, M.D.)

An

Inaugural Dissertation

on

Aneurism:

Distinguished by the Examination

of the

Pulse, Heart, and Sounds,

of the

Arteries of Hungary and

Northe[illegible] by

the Rules of Medicine

By

B. T. Gordon.

of Maryland.

I submit the following [illegible] [illegible]
[illegible] of the arteries termed Aneurism [illegible] the degree of
Dr. [illegible] of Medicine — subject
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

case was not and could

[illegible]

[illegible]

[illegible] disease, it

is important to define the

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]
[illegible] det i [illegible]
[illegible] i [illegible] og
[illegible]
[illegible]
[illegible]

and Animism, in order to [illegible] the [illegible] which does not properly belong here.

Until [illegible] [illegible] [illegible] [illegible] [illegible] "natural" and "physical" [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in "a classification of [illegible] Natural Table, forming

a humor, generally to one side of, or either the side of it." Sometimes, however, the same condition of the external humor, which gives rise to erosion, to [illegible] the whole circumference of the vessel.

The fact that the condition of the humors of the globe, being [illegible] [illegible] dimensions, they give rise to [illegible] the organization of these affections. Vision [illegible] may be [illegible] [illegible] in any of the

[illegible] of the artery, but they
[illegible]
and [illegible]
[illegible]
[illegible]
[illegible] of the [illegible]
[illegible]
[illegible]
[illegible]
[illegible] of [illegible]
[illegible], but [illegible]
[illegible]
[illegible]
[illegible] all [illegible] the
[illegible] of [illegible]
[illegible]
[illegible]

[illegible]
of the minor of the artery.

To that [illegible]
[illegible]
[illegible] appear, of the [illegible]
[illegible], and [illegible]
an envelope one or more
of the coats of the artery,
[illegible]
in which there is a [illegible]
[illegible] of [illegible] [illegible]
the coats of the vessel,
[illegible]

[illegible] found by the
[illegible] [illegible]
[illegible]

This latter kind of anem-
ia is usually caused by
some direct mechanical
[illegible] and
[illegible]
though [illegible] was at
first or [illegible], may, at
some advanced period
of the disease, be
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

The [illegible]
[illegible]
[illegible]

by an abnormal and morbid condition of the brain or the nervous system, but although pathologists have not [illegible]

[illegible] deposition of the lining membrane of the vessels.

It is difficult to believe that [illegible] ever formed [illegible] [illegible] [illegible] [illegible] in its normal and healthy condition. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of [illegible] [illegible] of [illegible] that [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] may de-
pend upon them. [illegible]
It is observed, however,
many acts, otherwise
absolutely harmless, op-
erating upon the [illegible]
give rise to Onanism.
Thus, [illegible]
[illegible]
[illegible]
[illegible]
[illegible], for example, [illegible]
have developed the affec-
tion in infants [illegible]
situated, that [illegible]
must have been [illegible]
[illegible], and the [illegible]

[illegible]

[illegible] established. Evaporation

[illegible]

[illegible] of [illegible]
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
unusual and violent
[illegible] but [illegible]
[illegible] [illegible]
followed by a [illegible]
and uneasy sensation,
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] but, if the [illegible]
[illegible] it is only
[illegible] [illegible]
[illegible] [illegible] [illegible]

akin the shape of the tumour there is nothing distinctive [illegible] resulting mainly [illegible] [illegible] is a guide in the diagnosis of the disease. When the seat of the disease is in the [illegible] thorax, the presence is made known by the disturbance of important functions caused by its mechanical encroachments upon the neighbouring organs.

Attention having been called to the existence in the thorax, of a tumor of some character, [illegible] and

distinctive nature are to
be looked for — although
some may absent or de-
ficient in particular cases
and simulated by other
diseases of the pulse of
a similar character. Pulsa-
tion is the most common
and reliable one. The force
upon pressure is found to be
increased in proportion as
it varies with the inter-
val, as the hand, and if
it is higher and stronger
at intervals and can be defined,
it would seldom if ever
mislead. Then there are

many circumstances which serve to modify the expression of these qualities — the depth of the fissure — the length of the lower lip, and that in the forward bulging of the surface — the distance from the lower edge of the lip to the point at which the profile should be defined.

On the purity of the Negro physiognomy either by a thin or a very fleshy lip, or by the lower edge of the lip, the profile should be defined. The first case [illegible]

[illegible] passing thro' the [illegible] portion, [illegible] a thrill, [illegible] at one the tissues become soft and free [illegible], the pressure below [illegible] it hard and tense.

Aneurismal tumors [illegible] a fluid pulsation, [illegible] rise to detect it, a pulsation of the heart, which is [illegible] perceived by the [illegible] hand, diminishing [illegible] and [illegible] capacity of the Aneurism.

In the surgical treatment, compression and the use of the ligature are

the means resorted to for the accomplishment of [illegible]. The simplest and earliest that used by our [illegible] has been in use and with some degree of success. It should be applied above the tumor to the femoral artery, between the aneurism and the heart, so as to [illegible] the current [illegible] but not completely, stopping [illegible] [illegible] is secured, whereas, were the circulation entirely [illegible] the [illegible] would be [illegible]. The advantages of compression are that it can at

at any moment be discontinued and other modes of treatment resorted to; and also the dangers attendant on the time of sounding for massage is avoided, for adjusting to its use and that in some cases the patient finds it impossible to bear it for the length of time required to effect a cure. Prohibited from office by law upon the high ground of a case of hopeless attendance.

[illegible]

[illegible]

the use of the ligature must be resorted to. The [illegible] for hitherto [illegible] the point of the [illegible] and the heart. [illegible] should be taken not to tie too tight or near the [illegible], for in front [illegible] a diseased portion of the might be grasped by the ligature, [illegible] from it, [illegible] the tumor [illegible] without [illegible] the point of the [illegible] vessels. After the operation the patient should be [illegible] in bed, [illegible]

placed in an easy position and carefully wrapped up to prevent a due circulation in the part. The application of cold is rarely if ever indicated. Gangrene and secondary hemorrhage are the results specially to be apprehended.

Basil H. Gordon.

An

Inaugural Dissertation

on

Phthisis Pulmonalis,

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland,

for the Degree of

Doctor of Medicine

by

Luther Wm. Zimmerman

of Maryland.

Woodsboro,

Fred. Co.

Feb. 12th 1864.

The most formidable and fatal disease that has ever attacked the human system, is that disease, known as "Tuberculous Consumption." It is a disease that causes every living being to shudder who may be subject to its wild and extravagant ravages. It is a disease that extends its havoc among the young, the most gifted, and the most beautiful of the human race. How painful and dreadful a disease it is to those who are liable to its afflictions; the very thought of which fills them with fear, and causes them to imagine that it is the very harbinger of death. How necessary then it is for the physician to forbear naming this disease to his patients with which they may be

afflicted. A greater number of persons fall victims to it, than to any other affection within the attendance of the Physician. It is a disease that requires careful study and attention, in order that the means may be required for detecting it in its primary stages, when the treatment that is adopted may prove decidedly beneficial. It is a well known fact that we do not possess the means of arresting the progress of the disease in its latter stages, hence the only alternative that is left us, is to modify the symptoms, and to mitigate the sufferings of the patient. It is in a few, though rare cases, that the power of medicine is able to effect a decided cure; but even in those cases,

It is only the instrument of nature, assisting her in the work she institutes. By many able writers Phthisis is looked upon as a local disorder: though the principal lesions exist in the pulmonary organs, the disease is disseminated throughout the whole body, but to a more slight degree. Phthisis is often viewed as a complicated disorder. There being at one time, some local mischief attended with inflammatory symptoms; at an other, a diseased condition diffused through the whole body, and which takes a deep hold on the pulmonary organs, though rarely confined to them. There seems to be much discrepancy as regards the nature of this disorder, by some it is

thought to be a scrofulous constitution upon which it depends, by others either cachexia or a tuberculous diathesis. In certain cases of consumption we frequently find the lungs the earliest affected, or among the first, to be laid-hold of in this disorder. In some cases the tuberculous diathesis makes itself so apparent that it attracts a great deal of attention. We find this to be the case quite frequently in Phthisis, particularly in the adult, where lungs are not only the first to be affected, but the organs most deeply and the worst disordered. Tuberculous matter when once deposited in the lungs constitutes an essential character of pulmonary consumption. Phthisis may be ushered in

upon the system through some local mischief, or this local mischief may be the sequel of a constitutional disorder. The constitutional malady is known to exist in the system from the fact that tuberculous matter has been accumulated. But the mere presence of tubercles is no pathognomonic symptom of the disease; since a morbid condition has always been known to be the precursor of consumption. The local disease which frequently precedes the formation of tubercles, is thought to be nothing more than an exciting cause of them.

Depositions. Shape of Tubercles.

The shape of the tubercles are said to be round or oval; which might cause one

to believe that the air cells are at times occupied by tubercular matter. It is said that Andral found tubercular matter in the minute twigs of the bronchia, where no ulceration existed; hence it is likely that it may be deposited in the air cells. Tubercles are as a general thing deposited in minute granules, some attaining the size of an almond, others not being so large. They present a grayish appearance, and being semitransparent, lying close to each other within a circumscribed space of the lung. There is a great tendency on the part of them to augment in number and increase in size; and as they grow in this two fold ratio, of course they approximate.

As the intervening space diminishes in size the tubercles upon each side of it become larger until finally they coalesce and form a large mass. As these granules grow in bulk and number, they also grow more yellow and opaque. The first evidence of a change in a tubercle is marked by a dark or yellowish spot upon its centre, which increases until it pervades the whole mass.

Softening Of Tubercles.

After tubercles have existed for some time, and attained their full size they begin to soften. The centre gives away first, falling into a pus-like mass, in which small particles of the original solid are known to exist. After the tubercles

begin to soften, the delicate cellular membrane which surrounds them, assumes the property of a secreting membrane and pours out pus into the cavity. This continues for a short time then the cavity begins to enlarge by ulceration. The openings of the bronchia into the cavity of the tubercle are brought to view when the tuberculous matter has been discharged from the cavity. Those openings before the discharge took place were surrounded by pus, and hence they were obstructed or compressed, or they were concealed by the process of ulceration caused by the pus enveloping them. Contracted and obliterated blood vessels and traces of pulmonary substance are seen extending

across the cavity with pus adhering to them. If we trace consumption in some of its phases, we find that the tubercles after attaining a certain size and consistency begin to soften and are either accompanied or followed by a pus secreting cavity. Although this is one of the regular courses run by Phthisis, it is not at all a necessary consequence; for in many cases when the tubercles have attained a certain size they grow harder and drier: the earthy matter is increased in quantity and a calcareous mass deposited instead of the tubercle and is enveloped in a membrane. In a few cases we find that tubercles do not advance so far, but become

absorbed in their early stages.

Anatomical Characters.

By studying tubercular Phthisis we find that it attacks the upper and back part of the upper lobes of the lungs in the majority of cases. We also find that the left lung is more obnoxious to tuberculous Phthisis than the right. But we frequently find exceptions to this rule: tubercles often attack the middle, or lower lobes of the pulmonary organs, in which cases they are not preceded by the gray granulations; but begin there as formed tubercles. Whenever we find the general health of the patient much impaired, and the fluids of the body much changed, this is frequently the case. The exact seat,

of tubercles in the lungs seems to be veiled in much obscurity. As regards cicatrization of the cavities after the tubercular matter has been discharged, it has most been found to be the as that of other cavities of the lungs. The cretaceous cyst which still remains after the matter has been found out of it is either connected with the mucous membrane of the bronchi, or is filled with a deposit of cellular tissue. The tissue which environs the tubercles presents various conditions. It will also be found to be serious to air, and in a tolerably healthy condition, if it be a constitutional disorder and not the consequence of some local inflamation.

Vivid inflamation precede, or follow; the formation and development, the tissue becomes indurated, exhibits various shades of color, from a light gray to a reddish tinge. In far advanced consumption of the lungs where the cavities become of considerable size, they are observed to occupy both sides of the lungs; but in different degrees. Often on one side, we find amphoric, or cavernous respiration and gurgling; but on the other, where only a small cavity exists we generally have pectoriloquy or crackling. Whilst both lungs are known to contain cavities they are also known not to possess them in the same degree. For often one lung will be entirely involved in the

disease and become as it were one complete cavity, whilst the other will contain but a few scattered tubercles and which are found to be more thickly settled at the summit than at the bottom of the lung. Pneumonia too is a frequent concomitant of Phthisis, often attacking that part of the lung immediately around the tubercle. Pleurisy frequently annoys the patient in consumption, the more in proportion to the tubercular deposit. In such cases it results mostly from plastic adhesions. Frequently the tubercles make a more rapid progress in the lungs, than the inflamation does in the pleura: This constitutes one of the worst forms of the disease. Then we have perforation of the lungs, and of course

as a consequence, Pneumothorax, from softening of the tubercles. In investigating the the various organs that are investicated in Tubercular Phthisis, it is found that it is not confined to the pulmonary, but attacks numerous other parts of the system at the same time. We frequently see the appendages of the lungs involved in this disorder, such as the serous tissues and the lymphatic glands at the bottom of the lungs. In children those parts are more frequently attacked by tubercles than the lungs; the same organs of the adult are often investicated, though to a much less extent. Next to the organs of which we have been speaking, the pleura is found to be thickly studded with tubercles, often giving rise to small prominences

upon the adhering surfaces of the membranes; they have also been seen in the false membranes thrown out in the pleura. Phthisis is by no means confined to the thoracic region, but like the cachectic maladies it involves the whole constitution of the patient. An other frequent and interesting fact of this disease, is the development of tubercles in the glands of the intestinal canal. Many of the lesions of the various organs during an attack of Phthisis, are wholly dependent upon the development of tubercles. Such as the deposit of tubercular matter in the serous and mucous membranes, spleen, liver, and many other organs. During an attack of consumption, tubercular pleurisy, peritonitis, and meningitis are often ushered in. Sometimes they constitute

the first morbid change, then they are called chronic pleurisy, or peritonitis, or acute hydrocephalus.

Mode of Attack.

Phthisis like many other affections attacks the pulmonary organs either as an acute or chronic disease; at the same time having some symptoms common to both maladies, and others peculiar to each. We generally see the acute form attended with some febrile excitement, and many other symptoms common to inflamation. We sometimes find the acute and chronic form attended with local inflamation; or may be almost entirely free from it. This local inflamation may be complicated with Phthisis, or it may precede, or follow the tubercular-

secretion. Often the mucous membranes are attacked by the chronic and the serous by the acute affection. But this is not always the case. Inflamation has been considered one of the exciting causes of tubercular consumption; and in those who seem predisposed to tuberculous affections, it has a great tendency to bring on the development of tubercles. Bronchitis, and also Pneumonia and Pleurisy, as has already been mentioned, are classed among the first lesions of tubercular phthisis. Bronchitis is mostly of the common mucous kind and rarely runs to tuberculous consumption.

Causes.

In speaking of the causes of tubercles we may divide them into two classes, viz local and general. The latter are those found originally in the body, or arising from the circumstances in which we may be placed. The former arise from some inflammatory or morbid condition that can be medicated by medical measures. Among the constitutional causes may be placed hereditary predisposition. This is universally admitted to act an important part in bringing on phthisis. Should either of the parents be labouring under consumption, it may be transmitted from either the one, or the other, to the offspring. Of the two the mother is supposed to

exert the greater influence in transmitting it to the offspring. Numerous other causes may be mentioned, among them are those that debilitate and depress the vital powers; such as inactivity of the body, exclusion from light, mental depression, an unhealthy atmosphere and imperfect diet are the most important. Great caution should be taken to guard against those influences. One of the great advantages accruing to the patient from a long journey is its invigorating influence and the pure air he receives. The feeble state in which a patient is often found after his recovery from a severe disease is thought to be a considerable exciting cause. Certain occupations,

and constrained positions, sedentary habits, irritating effluvia diffused in the atmosphere, and exposure to cold and heat alternately are important causes. The latter is rather a cause of the local inflammation that often precedes it.

Symptoms.

The symptoms of Phthisis are not always the same, but vary as the disease progresses. This is the case both with general and auscultatory symptoms. When the tubercles are in a solid state, and have not connected themselves into groups, we can learn nothing by means of auscultation. We can only make conjectures, but can come to no positive conclusions. But when the tubercles are softened and

are formed into grooves we hear a different sound from that which we hear when nothing but air is present. The symptoms of phthisis differ much in degree both in the acute and chronic varieties; In the acute form the tubercular deposit often commences its ravages in a number of organs at the same time; this often approaches an inflammatory secretion, which creates a disturbance of the whole body, and in many respects resembles inflammatory fever. In this form the pulse is found quick, frequent and often jerking; sometimes averaging from one hundred to one hundred and thirty. Hectic fever is a common accompaniment of Phthisis. It generally remains with the patient during

the day, being less severe in the morning, and more intense towards midday and evening. At night the patient is generally troubled with sweating, which indeed is often profuse, and which has a great tendency to break down and impair the strength of the patient. We very seldom meet with chills in the acute variety; sometimes there is a slight sensation of cold. The symptoms produced by the disorder of the alimentary canal are such as we usually have in high fever, such as constipation, thirst and anorexia, but generally not so intense as in most as in most fevers; for the alimentary canal is not affected in the commencement of the disorder. When the fever is

fully matured, the countenance and appearance of the patient is often much changed. The expression is restless. The lips often exhibit a pale color and the countenance becomes much flushed. Often when there is a high fever the flush is more circumscribed, and differs from the tint in Pneumonia by being lighter and a brighter red. There is no particular stage or form of consumption of which this can be a pathognomonic symptom, in as much as it is common to all forms of tubercular phthisis. We frequently see the cheek flushed in peritonitis or pleurisy. The rapid secretion of tubercular matter is often indicated in the extensive dilatation of the nostrils. Dyspnoea is generally present.

Extensive emaciation is frequently observed, being produced by the rapid progress of the disease and by the frequent and copious sweats. Sometimes the emaciation is slight, and a dusky or pathid hue of the complexion marks the progress and nature of the disease. The symptoms of chronic phthisis are not so easily ascertained, the development of the tubercles is much slower than usual, and the fever is of little consequence. The sensibility to cold is frequently much augmented: and the bluenes of the conjunctiva, and the peculiar appearance of the ends of the fingers are often indicative of a scrofulous diathesis. The impairment of nutrition and the

constitution in general is looked upon as a pathognomonic sign of some tuberculous disease. The cheeks are often painted with a circumscribed redness where the capillary circulation is active. Hectic fever is a common concomitant of phthisis in the advanced stage. It is common to diseases having suppurating cavities externally. The patient is often troubled with extreme exhaustion and oedema, which mostly occur in the latter stages of the disease. If inflammation, whether it be bronchial or any other kind, should precede phthisis, it is certain that it is not dependent upon that disease. Secondary inflamation of the lungs is a sure consequence of the tuberculous deposit.

Pulmonary Phthisis is often accompanied in its beginning with a slight cough; and which may be caused either by the inflammation or by the tubercles. Sometimes it comes on the patient in paroxysms; at other times there is a great deal of irregularity about it, it is generally worse in the morning than in the evening. The most severe fits of coughing are often caused by cavities of large size, and which still augment until they interfere with respiration. In the latter stages of the disease the patient is much annoyed by violent coughing during night and morning, but especially in the latter; of which he relieves himself by frequent expectoration of the accumulated

sputa. For a short time after the matter has been discharged he breathes with considerable ease. The cough often becomes feeble and cavernous in the last stages of phthisis. In the early stages of phthisis expectoration is very slight, consisting often of but a little whitish or transparent mucous. But it gradually increases in quantity and frequently assumes a purulent character. When the tubercles are ripe matured, and begin to soften, pus is found in the sputa, mostly having a yellowish color, differing but little from the mucopurulent matter. Sometimes the thick pasty substance amounts to eight or ten ounces in a day, where the softening of the tubercles progresses very rapidly.

After the matter is discharged from the cavities, the thick pus which is secreted by the lining membrane assumes an irregular roundish form with loose and collow edges. This constitutes what is called nummular sputa. At times the cavities become hard and often cease secreting all together; in such cases the mucus expectorated is very similar to that secreted by the bronchial tubes. In the advanced stages of consumption an other important symptom is observed, and that is dyspnoea. This is mostly caused by the rapid deposit of tubercular matter in a large number of vessicles of the lungs, which of course obstructs or impedes respiration.

It is generally worse in the acute variety, and forms a prominent symptom. Most of the pain which the patient experiences during an attack of phthisis, results from the inflamation that may have been present and not from the tubercles.

Physical Signs.

Among the most important signs of tubercular consumption are those of auscultation and percussion. We observe these signs mostly at the summit of the lungs. The vesicular respiration is feeble, harsh, or puerile; but the expiration is loud and prolonged. The vesicular soon runs into the bronchial respiration when tubercular matter fills the pulmonary vessicles. The bronchial respiration takes

place generally at the summit of the lungs, both anteriorly and posteriorly. It is usually heard at the posterior of the lungs, because the bronchial are larger there than anteriorly and the tubercles are first deposited around the larger bronchial tubes.

When the tubes are uncompressed the respiration is tolerably loud, but should they be compressed it is very slight.

When softening sets in we have a slight rhoncus, much like the exhibitant sound, it soon runs into crackling, and then into gurgling. The two latter are not constant symptoms. The cavernous respiration is developed with the gurgling and often replaces it. Percussion gives very little information as regards

the progress or approach of softening.
Dullness is early ascertained at the summit of the lungs; hence it may be first observed by percussing above the clavicle, upon, or immediately beneath. When tubercles exist in a great number, the resonance of the voice is more manifest than when there are but few. The resonance of the voice often passes into bronchophony. Should cavities exist in the lungs the resonance of the voice often runs into pectoriloquy, which generally remains a permanent symptom, becoming at times more or less distinct. When the resonance becomes diminished we frequently have the amphoric sound. Frequently in Phthisis

we have plentiful adhesions which cause considerable contraction of the parietes of the thorax. This is most manifest near the clavicle, or behind it. The same disorder often renders the ribs motionless. Bronchitis which quite frequently accompanies phthisis may assume the acute form, and present symptoms common to itself and to consumption; thus the cough, dyspnoea and the sensation of rhonci are symptoms of both. In this disorder the sputa is increased in quantity and assumes a transparent consistency. The sputa of pneumonia resembles this very much in character. The pleurisy in phthisis is generally of the dry kind; however sometimes effusion

takes place. The symptoms by which Pleurisy may be known are those of pain, varying from a slight stitch, to a sharp, lancinating pain, causing the patient to become very restless, at the same time he is not able to lie upon the affected side. Chronic Laryngitis is a common accompaniment of phthisis, often even it precedes it; it is caused by the irritating sputa passing over the larynx and trachea, and thus giving rise to inflamation and ulceration. Sometimes when it can be arrested in its early stages, the patient may be rescued from consumption. Chronic Tracheitis is of common occurrence in phthisis. It is generally known by cough and a

sensation of tickling above or below the upper margin of the sternum. It is a more obscure affection than the former. Chronic Pharyngitis or Clergyman's sore-throat as it is called, is often connected with phthisis. We frequently meet with another disorder, that is diarrhoea, which is indicative of the advanced stage of phthisis. It is caused by a diseased state of the intestinal follicles, and is generally of an intermittent character; sometimes occurring for several days, and then followed by constipation. In phthisis we frequently have a disorder of the serous membranes, the most common of which is Tuberculous meningitis, which occurs generally in children.

An other important disorder is dyspepsia, a very frequent but irregular symptom. A very rare complication of phthisis is fistula in ano. Among young women afflicted with phthisis we often see affections of the liver. Fatty degeneration of that organ is of the most frequent occurrence. Cyrrhosis sometimes sets in as an other symptom, but generally it precedes phthisis. This is seen mostly where intermittents are endemic.

Diagnosis.

In some forms of phthisis we experience considerable difficulty in the diagnosis of the disease. But when the symptoms make their appearance in the regular order, this difficulty is avoided.

The best mode to diagnose the disease, is to compare the symptoms of the disease observed, with other diseases, thought to have similar symptoms. Emaciation and the febrile excitement together with some of the other symptoms render it almost certain that the disease is incipient phthisis. In the advanced stages there is no difficulty in making the diagnosis. One of the most certain signs of phthisis is thought to be haemoptysis. Some regard it a pathognomonic sign of the disease: whilst others regard it as a symptom of less importance. The haemoptysis may occur from different causes, it may arise from some heart disease, when the lungs

become engorged and then relieve them=
selves by hemorrhage; a suspended
menstruation in some women may
give rise to it. It is often in the power
of the physician to cure consumption
following haemptysis; it is thought that
at least two thirds of those afflicted
with haemptysis are attacked by
phthisis. Haemptysis does not always
occur at a regular period in phthisis;
some-times we observe it before tubercles
are developed, at others, whilst they
are crude and few in number,
sometimes when cavities are formed.
Spitting of blood is of little importance
unless it be in considerable quantity,
as a general thing it should exceed

a wine glass full in twenty four hours, to be of any importance. Sometimes tubercular pleurisy bears an important part in diagnosing the disease.

Prognosis.

This is generally looked upon by the majority of practitioners as decidedly unfavorable in this affection. Though it has been viewed in this light, yet there are some who have been cured of this troublesome disease; so that it can not truly be said to be altogether unfavorable. When we observe persons who exhibit this constitutional tendency, and who present marked signs of a scrofulous constitution indicated by the dark complexion of the skin, we may not

assumed that the termination of the disease is unfavorable. In fact when Phthisis has held possession of the system rightly it rarely terminates favorably.

Duration.

The course of ordinary Phthisis is slow. Dr. Louis' estimation of its duration places it at about eighteen months. Though at times the acute form will terminate in three months.

Treatment.

The mode of treating this disorder varies very much, but it may be divided into the curative and palliative plan. By some writers the term consumption is restricted only to the advanced stage of this disorder, and where the

constitutional deterioration is extreme. If such should be the case, the treatment would be altogether palliative. Much may be done in preventing the recurrence of the disease and of alleviating the sufferings of the patient when once he is afflicted. A rigid prophylactic regimen should be prescribed when there is thought to be a predisposition to the disease. The patient should invigorate his body, and get plenty of fresh air, take moderate exercise, eat a good deal of animal food of the best quality, and get a good portion of rest at night. Commit no excess of any kind, either mental or corporeal. Make use of warm clothing, and frequently resort to the cold shower-bath.

Removal to a warm climate is very agreable to the patients. In the palliative plan of treatment many remedies have been tried, but few with success. Where the developement of tubercles is dependent upon inflamiation, we may resort to antiphlogistics to subdue it. Great attention should be paid to the diet, it should be of the proper kind and nourishing. Such alteratives should be used in phthisis as exert a tonic and invigorating influence. Mercury as a general thing is injurious except where there is inflamation. An other remedy which acts an important part in this disease, is iodine; it is especially applicable to cases that have been preceded by chronic inflamation

of the trachea and larger air tubes and pass slowly into phthisis. The preparation of iodine mostly used is Lugol's solution prepared according to the U.S. Pharmacopoeia. It is given in doses from three to six drops, three times daily; after using it for a time should it act as an irritant to the system, its use should be discontinued. It should be remembered that the action of iodine is slow, and when it acts well it improves the strength, complexion and cough of the patient: the latter may be assisted by expectorants given with the iodine. The iodine acts as an alterative, and may be given with other alteratives such as comp. decoction of sarsaparilla, or with

mild tonics. The hydriodate of potassa is prefered by many to the solution. It is not so liable to irritate the digestive organs. The dose is five grains thrice daily, gradually increased to ten grains. To prevent irritation it should not be used without intermission. This as well as the former preparation exerts the greatest influence in the commencement of phthisis. A highly important medicine, and one of the best in the treatment of phthisis is cod liver oil. The taste is very apt to create disgust in a patient. The dose of it is a tablespoonful three times a day in the froth of beer or water. A good plan is to chew a little orange seed before and after taking to destroy

the taste. It is best to commence with small doses; a small teaspoonful is about the dose to commence with. Sometimes the intestines are so irritated that diarrhoea prevents the persistence in the use of the cod liver oil. When the good effects of cod liver oil begin to manifest itself, we observe an increase in flesh; and the pain and cough are diminished, and frequently removed. This oil will relieve, nay, but cure few. In persons in whom we observe an hereditary predisposition to this disease, the use of this oil often proves most beneficial.
A long journey or a change of residence often exerts a good influence upon the patient. If he be sufficiently strong in

journey should be made on horse-back. Often a sea voyage proves useful. The Physician has often to combat the intercurrent inflammation of the chest. At these the bronchial or tracheal mucous membranes are most frequently attacked. The tickling, cough and sputa depend mostly upon inflammation. This irritation is very annoying to the patient. Although it is not advisable to administer opiates in phthisis, yet they should be resorted to when there is much irritation, and when the patient can not obtain rest. By some patients hyoscyamus is preferred to opium: The following mixture is very good in such cases. ℞. Syrup of Tolu. ℥i.
Wine of Opium. ʒiss.
Hyoscyamus grs. 6.
Gum Arabic ʒi. M.

It is to be taken in three days, a table-spoonful at a time. The hyoscyamus should be watched, or it may produce narcotism. The preparations of opium that are generally administered are the salts of morphia. Not more than a ¼ or a ⅓ of a grain should be administered in twenty four hours. The syrup of senega or squill may be used as expectorants; should there be febrile excitement antimony may be used. Slight bleeding or cupping may be used in those cases of pneumonia complicated with phthisis. At times tartar emetic may be used internally. Pleurisy is another complication of phthisis which the physician is called upon to treat, and which is un-

obstinate at times. It should be removed as soon as possible. The antiphlogistic regimen must be resorted to as in all inflammations, assisted afterwards by small doses of antimony and opium, or Dover's powder. After the acute affection has passed away, we may use blisters two or three inches square upon the diseased part, so as to keep up a regular counterirritation upon the surface. As they draw they should be changed to a new spot, but reapplied to the old one as soon as healed: hair blisters are best used in the acute affection. Calomel is another remedy which will prove efficacious in this disease. It should be used with caution as it

often acts injuriously in Phthisis. It should be given in small doses and only for a short time. Gastritis, Pneumothorax and Tracheitis may be treated by depletion and the general alteratives such as a sea voyage or a journey &c. Laryngitis may be treated by repeated, but small number of leeches, Iodine ointment and the internal use of Lugol's Solution. A blister behind the neck may be useful. In Pharyngitis we may resort to the alterative and tonic treatment, and to cold washing of the upper part of the neck and chest. The treatment of diarrhoea is sometimes very difficult. It is generally treated by opiates, combined with astringents, such as Kino.

The profuse sweating of which the patient complains may be remedied by light clothes, the use of acids and alkalies, especially the former. The nitric and aromatic sulphuric acids are preferred to all others. The dose is ten or twenty drops three times a day in sweetened water or infusion of wild cherry bark. When the acids disagree with the stomach we may use the alkalies; lime water with milk in different proportions proves the best. During the course of phthisis the patient is much annoyed by hectic fever: the chills of which are often severe, and occur in such paroxysms that quinine may be resorted to for relief: It may be

given in six grain doses before the chill. But this often fails. A number of other remedies have been tried in this disease but with little success. Among them were digitalis, hydrocyanic acid and acetate of lead. The first two have been used for their influence over the circulation. The latter has been used in the hectic fever and diarrhoea, which frequently occur. Two grains of acetate of lead with a ¼gr. of opium, four or five times daily, forms a good remedy for the diarrhoea. Among other remedies that have been used in phthisis are the chalybeates. The preparation generally used is iodide of iron, in the form of a syrup, in doses from 10 to 30 drops 3 times a day;

larger doses are apt to cause nausea and a sense of constriction at the epigastrium. Other preparations of iron are also sometimes used. Iron is best used where there is depression and constitutional deterioration. A resort to mineral springs is often beneficial to the patient: among the best is the Red Sulphur Springs of Virginia. Among the best methods to prevent an attack of pulmonary phthisis is to exercise the lungs: which may be done by reading or speaking aloud.

AN

INAUGURAL DISSERTATION

ON

The Causes OF DISEASE

Submitted

To The Examination

of the

Provost Regents & Faculty of Physic

OF THE

University of Maryland

For the Degree of Doctor of Medicine

By

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OF BALTIMORE

AD

MDCCCLXIV

THE CAUSE OF DISEASE. I

The Ascertained Causes of disease are many and various. Whatever ministers to life health or enjoyment may become the medium under changing circumstances of pain, disease, or death. The Atmosphere in which we are constantly immersed is full of dangers. Both the Organic and inorganic world of matter around us abound in poisons: they lurk in our very food which becomes pernicious when taken in excess, or when it consists of certain substances. Our passions and emotions also, may even some of our better impulses, when strained or perverted lead to our physical destruction. The seeds of our decay are within as well as around us. Diseases may arise from chemical and mechanical changes more

especially those termed atmospherical changes. Under the head of atmospherical causes. we shall find that those varieties in the state of the air which proceed from mere differences of degree in its natural qualities. may be productive of disease such are extremes of heat and cold. sudden variations of temperature. excessive moisture or excessive dryness. different electric conditions. difference of pressure indicated by the barometer a deficiency of light. Again the atmosphere may be a source of disease. in consequence of its being loaded with impurities. malaria. contagions of various kinds. and noxious gasses in general may be considered as so many poisons

Nutriment. under this we may place the use of food of which the quality is bad and hurtful. This cause also strictly belongs to the Class of poisons. Again an insufficient supply of healthy foods: a still more common cause is excess in eating and intemperence in drinking. The numerous poisons are also a prolif source of disease.

Employments another great Class among the causes of disease might be formed by considering together the influence of various trades and avocations which are directly injurious to the health of those who pursue them.

Exercise. we know by ample experience. that a certain amount of bodily exercise

is essential to good to good health. we see the evil consequences of overstepping that amount. in the deformaties and disorders that result from too severe and continued labour. A more numerous train of complaints follow the opposite extreme in which from indolence or from necessity. but little exercise is taken. Sleep. excessive indulgence in sleep on the one hand. and a long continued want or interruption of repose on the other almost invariably give rise to serious maladies.

Mental and moral Causes very many diseases have a mental Origin excessive intellectual toil the dominion of Violent passions. the frequent recurrence of strong

mental emmotions Vicious and exhausting indulgences. each and all will sap the strength and grievously impair the health of the body: And perhaps there is no cause of corporeal disease more clearly made out or more certainly effective than a continuence of mental anxiety and distress.

Hereditory tendencies to disease and malformations when we add to this catalogue of the sources of disease all those morbid tendencies which are hereditory. And those which result from Original Malformation and are congenital. we shall have a tolerably complete list of the manifold dangers to which our mortal frames are continually liable.

Immediate or proximate Causes of disease from the part which the Blood performs in the ordinary processes of nutrition it cannot be doubted that it undergoes important alterations when these processes take place in an abnormal manner. These alterations must be sometimes the causes and sometimes the effects of the morbid phenomena which constitutes what may be termed the disease. Thus when some local cause affecting the solid tissues of a certain part of the body produces inflamation in them. their normal relations to the Blood is altered: the consequence is the Blood in passing through them undergoes a different set of changes from those for which it was originally adapted

and this its own character undergoes an alteration which in time soon becomes diffused throughout the whole mass of the circulating fluid. and is in its turn the cause of morbid phenomena in remote parts of the system.

On the other hand, the strong analogy that exists many constitutional diseases, and the effects of poisonous agents introduced into the blood, appears clearly to point to the inference that these diseases are due to the action of some corrupting matter which has been directly introduced into the current of the circulating fluid. and which has affected both its physical and its vital properties

Certain forms of cutaneous eruptions. rheumatism &c which do not immediately

depend upon external causes necessarily involves the idea of the convergence of a morbific agent in the circulating fluid.
The palsy produced by lead is a very interesting example in which the agent is known to be mingled with the blood, and to be deposited in the parts affected which are generally symmetrical.
That the blood is subject to a great variety of morbid alterations, which are sometimes the causes and sometimes the results of disease, cannot for a moment be doubted. But our knowledge of the nature of these changes is as yet very insufficient the great amount of attention which is being directed by chemical pathologists to the subject, however will doubtless ere

long produce some important results the biliary and urinary secretions is a most fertile source of slight disorders of the system It is largely concerned in producing many severe diseases. and if complete, will certainly and rapidly produce fatal results. The blood then we see is made up of many constituents and is of course a compound. All the elements of which are in harmony with each other, which may be destroyed by innumerable foreign or disturbing agencies when introduced into it. this is what is meant when it is said that the introduction of vitiated or soiled or uncongenial substances into the blood decomposes more or less of it. and thus rendering it in the same proportion unfit

for the purposes of life. and if it remains in the body. it passes from one state of degeneration to another and produces a great variety of diseases. as the following. Chronic Opthalmia. Chronic Catarrh. Chronic Bronchitis. Asthma. Phthisis Pulmonalis. Pericarditis. Hepatitis. or Liver Complaints or Nephritis or Kidney disease. Tabes mesenterica or disease of the mesenteric Glands Haemorrhoids or piles. Fistula in ano or perino. Balanitis Flour albus &c or discharges from the genital organs which are not of Syphilitic character. Boils Carbuncles. Eruptions. on the surface such as. Blotches. pimples. pustules. Scabs. Scales. Measels. Scarlet fever. Salt Rheum. Scald head Erysipelas. Leprosy Scrofulous

sores. ulcers. fever sores. Sides. Tumours. Abscesses. Small Pox. Kine Pox &c &c All forms of Nervous Diseases. as Chorea. or St Vitus Dance. Tic Doloreux. Palsy. or Paralysis Deranged menses too dark or too light in Color too thick or too thin in consistence. Impotence. or loss of sexual powers. wasting of any of the Organs of the whole System Worms. loss of appetite and of the tone of the digestive organs. loss of Sight. hearing. and Sensation Chronic Rheumatism. premature Baldness. Cold Skin. and Extremeties. determination of the Blood to particular Organs Fevers of all kinds. Diarrhoea Dyssentery. Cholera Morbus. Fits of every Kind. Insanity and many other forms of derangement

That various changes are induced in the Blood is proved by experiment the morbid Blood injected into the Veins or Cellular membrane of a healthy Animal immediately induces serious or fatal effects. Experiments have been tried to inject diseased Blood into the arteries and Veins of animals did away with fatal results. The same results follow the injection of Blood from a patient affected with Variola. from these facts and similar it becomes quite obvious that the Blood itself is morbidly affected in various diseases as the worst forms of fevers Variola &c. The Blood may become vitiated not only from a deficient quantity of food but from deleterious matters incorporated with the air or food

Contagious miasmata. Malaria. may float in the atmosphere and possibly the Blood. Poisonous substances may be conveyed into the circulating system more or less promptly by means of the skin. Many interesting facts of this kind are on record but none is more so than salt provisions in inducing scorbutus and of the ergot in inducing a tendency to gangrene of the extremeties.

The nervous system has also a direct influence upon the Blood in the experiments in which the eighth pair of nerves has been divided. It is said the Venous Blood is prevented from being changed into Arterial. That the Blood even coagulates and the fibrine and the haemo-

logim separate in the larger pulmonary Arteries and Veins and that Arterial Blood drawn from the Carotid was deprived of a portion of its fibrine.

As an improper kind of diet produces a baneful influence upon the Composition of the Blood so does a disordered and loaded state of the bowels. this is apparent from the secretions the saliva the perspiration and the urine are alike deranged in their obvious qualities. but especially in odor: And there is more or less of the bloodless appearence seen in Chlorosis Icterus is another disease in which the Blood is known to suffer. the colouring principle at least of the bile is retained in the Blood. it appears to act as a

narcotic upon the Brain. inducing drowsiness. The serum of the Blood and the secretion from the skin and kidneys are in some cases alike tinged with a yellow colouring matter of the bile.
Every one knows the baneful influence of a suppressed state of another secretion Urine It cannot be doubted that some of the principles of this secretion are retained in the Blood. in the human subject. suppression of the urine or the presence of some of its principles in the Blood. produces coma and death. But if the secretions become sometime suppressed and produce a reflex alteration in the Blood. there is a case in which the Blood becomes morbidly-

affected together with an excessive secretion as in diabetes. The Blood in this disease is more serous and contains less fibrine than usual. it would be interesting to examine to examine the effects upon the Blood of excessive perspiration. undue Lactation and profuse or protracted menorrhagia or Leucorrhoea

The facts which result from this inquiry are these 1st in many diseases as fever. inflamation Chlorosis scorbutus. these are undoubted morbid changes induced in the Blood itself 2nd that other changes are induced by impure atmosphere and an unwholesome diet 3d that various miasmata in the atmosph er and various poisonous qualities

in food. produces morbid Changes in the Blood & that suppressed secretions induce other morbid Changes in this fluid. That an affection of the innervation. or of the nervous system. may as is Observed on a division of the eighth pair of nerves. produces its peculiar Changes in the Circulating Mass.

As all the fluids with the exception of the lymph and Chyle. are derived from the Blood and as the two former enter into the constitution of the latter. and convey into it all the deleterious principles which they may Contain. the Blood may be Considered as the Only fluid subject to original deleterious Changes. or at least the Only one to which we are to look

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is the primary seat of diseases requiring our attention. The numerous liquid secretions, if deranged at the time of their formation, must be so in consequence of the diseased condition of the Blood, from which they are derived, or of the organs by which they are elaborated. If they become deranged after their formation, as sometimes happens with the bile, urine, and some other secretions, it must be owing to their undue detention, or to some undue influence of the surrounding parts, in either of which cases the solids are in fault.

There can be no doubt that the Blood is very frequently the source of diseases by serving as a vehicle through which noxious substances are enabled to reach the parts upon

which they act. Many poisons prove fatal by entering the Circulation through the medium of absorption: and the miasmatic and contagious effluvia probably operate on the System through the same Channel: How far they act on the Blood itself with which they are mingled. So as to change its Constitution and thus render it directly the seat of disease is altogether uncertain. it is highly probable that such a change is sometimes effected and that the noxious Agent after entering the Circulation. and only produces a morbid impression on the Solids with which it is brought into Contact with the Blood: but also directly deteriorates the qualities of that fluid. and renders it less capable or altogether incapable of performing

its due offices in the animal economy. Thus the injection of putrid animal substances into the veins is followed by a loss of coagulability in the blood and a tendency to a more speedy decomposition: and the same effects have resulted from the influence of certain poisons. The blood thus altered appear no longer to furnish the solids through which it flows the stimulus requisite to the support of their healthy contraction. and the consequence of this as well as of its own loss of cohesive affinity. is that it percolates through the tissues in every direction. Other phenomena result analogous to those which follow exposure to putrid exhalations or the contagion of typhus, and the inference

is that the Agents operate in like manner directly on the Blood.

There are other means by which the Blood may become Contaminated. besides the absorption of noxious substances. extraneous to the System. The body itself occasionally affords similar supplies of deleterious matter to the absorbents. thus the fetid contents of the intestines if long retained. are often partially taken up and conveyed into the Blood vessels. with very injurious consequences to the health: And in cases of mortification the putrid results of this process follow a similar course in the Circulation. and produce effects not unlike those which follow the direct injection of decomposed organic substances. Various

morbid products: the result of deranged secretion. Such as pus. and the sanies of unhealthy ulcers. are also occasionally absorbed. and vitiate the Blood.

Another source of derangement in the Blood. is the accumulation of certain principles which are thrown off by the excretory functions. and which when retained. are capable of exercising a highly injurious influence. this accumulation may result from a more rapid production of the principle in question. or from a diminished or suspended action of the organs by which they are eliminated.

Thus uric acid is generated in the animal economy in a healthy state. but is thrown off by the kidneys so as not to be

discoverable in the Blood. in persons who live chiefly on animal food. and take little exercise. the quantity of this acid is sometimes very much increased. so that it is not only secreted in unusual abundance by the kidneys. constituting gravel. but is also deposited in various other parts of the body. especially in the joints and fibrous tissues. It is not improbable that its accumulation in the Blood. under these circumstances may be the cause of some of those peculiarities. which distinguish gouty affections. Again when the secretion of the urine is arrested. the urea which commonly escapes with this secretion remains in the Blood. and imparts to it highly noxious properties the same remarks may be made

of the colouring principle of the bile. which upon a cessation of the hepatic secretion becomes redundant in the Blood. and. being thrown off by the Skin and Kidneys produces jaundice. There is reason to believe that other principles elaborated by the digestive or Absorbent process. enter the current of the Circulation and prove innocent in health only because they are separated with the urinary. cutaneous. pulmonary or intestinal secretions. Hence probably one of the Sources of the numerous evils which result from the suppression of these secretions in certain febrile Conditions. the Sour breath and Sour perspiration. evince the existence of an acid in the Blood. which probably aids Other causes in sustaining the disease

and the elimination of which may be one of the advantages resulting from the use of diaphoretic medicines in these complaints Sometimes under the influence of a rich diet and a vigorous digestion. with a comparative deficiency in the nutrative process. the solid organic principles of the Blood increase so much as to constitute a state of disease. The Blood is intensely red and when taken from the body. affords a larger and firmer coagulum than in health it is in this state highly stimulating to the organs and may give rise to a general excitement amounting to fever or to some local inflamation. or hemorrhage.

Again. owing to the use of meagre diet or to the influence of feeble digestion. comb-

med perhaps with unusual Vigor in the process of absorption. A condition of the Blood sometimes occurs in which the solid constituents are deficient, and the proportion of liquid excessive. Not only is the Blood liable to a general excess, or deficiency of its organic constituents, but there are also great diversities in the proportion which these constituents severally bear to each other. An excess or deficiency in any one of them may become a source of disease: thus an excess of the red corpuscles often occurs without any increase of the albumen or fibrine, this is indicated by a high degree of colour in the Blood, a greater or less coloration of the Serum, a large but not unusually firm Coagulum and the uniform absence

of the buffy coat. it constitutes an active phlogistic condition and predisposes to fever and hemorrhages. If in connection with this excess of the red corpuscles there be a deficiency of fibrine the clot may still be large; but it will be unusually soft and weak with the tendency to fever and hemorrhage and be a feeble state of the vital actions. but unfrequently the red corpuscles instead of being in excess become deficient. the principles being either unaffected, positively increased or diminished in less proportion. in this state. the Blood is less highly coloured the coagulum small in proportion to the Serum. and the surface of it often covered with a buffy coat. and the system exhibits the morbid phenomena of the anaemia

This condition is induced by low living and the loss of blood. and it is a singular fact that the red corpuscles suffer from these causes much more and sooner than the fibrine and albumen. Deficiency of fibrine results from insufficient food. from excessive fatigue by which it is consumed. and from various influences. the mode of action of which is unknown. as in the low forms of fever it is shown by a feeble coagulating power in the blood or the total want of it. by the smallness and softness of the coagulum when formed. and by the absence of the buffy coat. it probably predisposes to hemorrhages and to diseases of a low typhoid character and interferes

greatly with the reparative power of the System.

A deficiency of albumen may take place in consequence of an impoverished diet. great loss of Blood. or morbid albuminous secretion as in Bright's Disease of the Kidneys it is highly important as constituting a predisposition to dropsy.

The watery part of the Blood. which in consequence of a diminished supply of of the solid ingredients. is occasionally in very great excess. and may become as greatly deficient under the influence of a rapid and abundant secretion. Such for example as occurs in bad cases of malignant-cholera. The Blood then becomes thick and flows. with difficulty through the capi-

laries; the respiratory function as well as the function of nutrition and calorification is imperfectly performed; the heart beats feebly. the nervous centers languish under their want of accustomed stimulus; and the system either sinks irrecoverably into a state of universal prostration. or reacts slowly. and finds its way again to a state of health. through a long series of irregular sanguineous determinations. amounting often to inflammation. in the midst of the greatest prostration proceeding from this cause. the patient often has a degree of thirst equal to that which attends the highest febrile excitement.

The salts in the blood escape with its

watery portion. and much importance has been attached to this fact in a pathological point of view. and it has been attempted with some success to show that the presence of Saline matter is essential to the change of Venous into Arterial Blood: and the black colour of the Blood in Cholera has been ascribed to a deficiency of its Salts. This Colour however may be attributed also in part to a Concentration of the colouring matter dependent upon the loss of much of the fibrine and the albumen of the Blood along with its watery portion. while the red corpuscles remain; for haematosine is black when isolated in mass. Saline matter impairs the coagulability of the fibrine in Blood-

out of the body

It is well known that Blood which does not undergo the change from Venous to Arterial in the lungs becomes unfit for the Sustenance of life, but whether the result is owing to the accumulation of some carbonaceous principle which proves noxious when in excess or to the want of that oxygenation. which it is generally believed that the Blood undergoes in the lungs is a point which yet remains undecided

The different Virulent and miasmatic Substances which on being introduced into the Blood. and diminish its coagulability may act upon the fibrine like alkaline Substances. thus. too. the venom of the Viper may act. which. according to some writers pro-

duce a dissolution of the Blood.
The Blood of persons then whose lungs are
begining to be tuberculous offers that partic
ular modification which belongs to feeble con
stitutions they are truly in a state of commen
cing anaemia and their Blood is like that
of patients who have been bled several times
This Condition of the Blood which accompa-
nies the first stage of phthisis and which
to all appearance proceeds it is the same
condition found in every case where from any
cause the powers of life have lost their energy
Who is not familiar with the shrunken
and pale and feeble look which belongs
to most consumptives even in the first
stages of their malady. There are young
girls who when consumption is imminent

become so frail and pallid and get hac
ic. So few symptoms that it sometimes
happens that the nature of their dis-
ease is misunderstood. and that they are
supposed to be chlorotic. on the other ha-
nd there are cases of thoracis. which ow
ing to the complication of a Bronchitis.
or of a merely nervous cough. have thrown
the most accomplished observers into dou-
bt and made them apprehend a deve-
lopement of tubercles.
The appearance of the Blood in the second
stages of phthisis is well explained by
the changes occurring in its composition. in
the earlier periods of the disease the Blood offers
no particularity except that its clot gene-
rally is rather small and dense which may

be explained by the moderate quantity of its globules. and its preservation of a normal proportion of fibrine. But with the progress of the disease. the softening of the tubercles. and the formation of cavities. the clot becoming smaller and smaller. is covered with a buffy coat. the more perfectly formed in proportion to the degree of disorganization of the lung. Two circumstances evidently contribute to produce this buffy coat. the increase of fibrine which takes place so frequently in the last stage of phthisis. and at the same time the progressive decrease of the globules. so that there are two causes of an excess of fibrine relatively to the globules. and if the Blood flow in a proper manner. a buffy coat must necessarily

ce formed. This indeed is what happens. and a buffy coat upon the surface of the Clot is nearly as constant in the advanced stages of phthisis as in pneumonia or acute articular rheumatism. Considered in relation to the causes which govern its formation. it holds a middle place between the Chlorotic and the inflammatory buffy coat. The morbid humour may account for the long train of nervous diseases. the normal condition of the Brain. depends upon the state of the Blood. with which it is supplied. now if this be diseased will it not cause a corresponding effect in this Organ. and the nerves proceeding from it: Consequently the nervous System and the mind dependent upon it become more or less disordered

and sometimes deranged.
We perceive that there is a morbed condition of the Blood in diseases generally and that in some cases there is an alteration in this fluid. in the natural component or constituent principles. although these facts are obvious and plain. if other evidence were wanting. we have it in the class of eruptive diseases. as in measels. scarlatina. &c Here the whole class of fluids is contaminated by specific poison. or virus. and as the invasion of these diseases. nature establishes a healthy action. to eliminate the poisonous matter. by the skin. to the surface. to accomplish which the heart and great Blood Vessels are preternaturally stimulated by this poison. which is thus determined to the surface

of the body. as we see in an extensive crop of pustules or eruptions. covering almost the whole body. The fevers then. by which they are thus ushered. ceases spontaneously. having performed its office in thus dislodging the irritating agents from the fluids or organs in which they were seated.

In confirmation of these Views I might refer to those diseases which are termed hereditory being communicated from parent to child as consumption. Scrofula. Venereal psoriasis &c. it is evident that the Blood only is the medium of communication as it is conveyed through the umbilical cord from the mother to the foetus and which must of necessity. contain the very same elements of disease. Look at the phenomena

of small Pox and Cow pox. a little lymph is taken from a pustule on the arm of a person labouring under this disease and is inserted under the cuticle. the absorbents carry the Virus into the circulation and there identical diseases are thus developed and it is self evident that this Virus has circulated in the Blood and become to it so noxious that the great and never failing conservative principle is immediately set up to eliminate or seperate it from this fluid. and to expel it from the system by the cutaneous emunctories. the termination of disease. as fever. by which morbid. agents are thrown to some part as the extremities. and thus causing irritation. inflamation. and ulceration.

thereby forming a drain. called a fever
sore by which the patients life is preserv
ed. In the treatment of many diseases,
shows that the Blood is concerned in
the production as well as the continua
nce of it insomuch as we find that lo-
cal applications only afford temporary
relief. and we can cure these only by
an alterative course. and by proper
agents administered internally.
The translation of disease from one part
to another is a further evidence that
the Blood is concerned. for instance in
gout and rheumatism. how often is there
translation of morbid matter from the
seat of irritation to the heart or some
other vital part. and which sometimes

proves fatal

From a careful analysis of the Blood numerous substances have been discovered in it. as carbonic and other acids - substances resembling. mucus. Oil. bran coloring matter of bile and of the urine, and urea - &c The Blood of all the fluid parts of the body. seems. from its complicated formation. to be most liable to morbid changes. if any of the secretions be thus affected by which impurities are retained. the Blood must become changed and even diseased. It is in this manner that impure air. improper diet. and defective excretion of the faces. urine or perspirable matter act in impairing the condition of the Blood: both the

guarding and guiding, it may also be wrong.

Persons who have died of Cholera and whose blood have been experimented upon was found to be charged with an acid. Acid has also been found in the perspirable matter. it has also been proved that acid exists in the lungs from the act of expiring the breath into lime water through a tube a precipitate is thrown down, which is the carbonate of lime. That acid really exists in the blood may be demonstrated by the application of litmus paper to the skin of a person perspiring freely. the paper is immediately stained red: the proximate or exciting cause of disease then appears to be an excess of carbonic acid

generated in the lungs, and other parts, from the vitiated air which is found in an atmosphere impregnated to a greater or less extent with a certain poisonous quality, derived in all probability, from the putrid animal and vegetable excretions arising from such substances as may be then undergoing decomposition upon the earth's surface, and also to the addition, perhaps, of certain miphitic principle or gas, called ozone, which excess of carbonic acid entering the circulation, and being eliminated by the blood through the secretory orifices of the blood vessels is thrown upon the internal organs, or upon some particular part already predisposed, by debility or other causes, to take on a

diseased action. As in dysentery, for instance, where the irritating acid is received upon the internal mucous coat of the colon or large intestine, acting thereon similarly to any irritant poison, and thus exciting the peculiar inflammation, which in turn gives rise to spasmodic pains, mucus and bloody discharges from the bowels and other symptoms characteristic of this form of disease, and which symptoms are merely so many efforts of nature to throw out of the system an unwelcome visitor or rather to throw off the noxious uric acid.

Tubercular matter is deposited from the Blood, it may be considered as a morbid constituent of the Blood. it is probable

that the deposit, in the very beginning, is fluid; but it is never seen in that state, it is certainly not so firm at first as it generally becomes afterwards. but its more watery parts are removed by absorption and then there remains a pale yellowish, gray, opaque, semi-gelatinous substance
This tubercular matter, so deposited, does not always assume a round form, far from it; the shape in which it appears depends upon the nature of the part wherein it is formed.
Tubercular matter may be deposited on the lungs, alimentary canal, urinary organs, organs of generation, Fallopian tubes, and uterus &c when thus deposited it is liable to increase, it grows larger by

continued accretion & attrition of deposits upon its surface. This being the case, we see how tubercles assume different shapes according as they occur in different parts. Sometimes large masses of tubercular matter is found in the lungs or elsewhere and in these masses we see that the process of softening is going on at several points within the mass at the same time. On the nervous system tubercles are by no means unfrequent but are met with oftener in the Brain than any other part of that system. That inflammatory affections which leads to effusion of serous fluid in the cerebral ventricles of young children and is known by the name of hydrocephalus occurs principally in connection with the conne-

ction with the scrofulous diathesis it is very seldom that scrofulous tubercles occur in one organ only, almost always they are met with in at least two and frequently in all the parts at once which are liable to be affected by them. Sometimes the lungs alone are affected but generally both the lungs and the intestines are occupied by the disease. The celebrated French pathologist M. Louis affirms that if you find tubercles in any other organ we are sure to find them also, and in greater number and and further advanced, in the lungs in persons in whom scrofulous disease is most likely to declare itself are marked during childhood by pale and lusty complexions large heads, narrow chests, protuberent

bellies. soft and flabby muscles, and a languid and feeble circulation. but the strumous disposition very often accompanies a variety of sanguine temperament also, and is indicated by light or red hair, gray or blue eyes, with large and projecting eyelids and long silken lashes, a fair transparent brilliancy of skin, and long sharp.

This red colour which is well defined is generally easily changed, however by cold, to purple or livid. the skin is thin and readily irritated. the sclerotic has often a peculiar pearly lustre, and the extremeties are subject to chilblains. but scrofula is by no means confined to persons of the serous or of the sanguine temperament. it is frequently though less common, in what has

been called the melancholic or bilious temperament. in persons of a dark muddy complexion and harsh skin in whom the mental and vital energies are more sluggish and dull. In persons of this cast. Scrofula when it does occur is even more than usually obstinate and intractable an unequal circulation of the Blood is one great cause of tubercles. consequently. it becomes of primary importance in the treatment of tubercles as well as the prevention to adopt appropriate means to equalize the circulation This fact is very necessary to understand as it involves principles of great practical importance.

It has been shown before that the tuberculous matter is contained in the Blood and

and hence it follows that a healthy secreting
Surface may separate from this fluid
not only the materials of its own peculi-
iar nature, but also those of tuberculous
depositions of matter.
The mucus membrane of the air cells peculiar
to the lungs secrete not only mucus
but tuberculous substances which after a
period if not thrown off by the excretions
of the System is seperated and thrown
upon some organ, and then appears in
the form of a dull yellow spot, and
And the object should be to remove this
tuberculous diathesis which like the scrof
ula and consumption, may exist many
years in the System before being develo-
ped.

It has been shown that tubercles are found in different parts of the body by unnatural secretions of the Blood. and thus having a clue to its origin nature and progress we are led to correct views to its treatment. What is this treatment. according to the pathological condition of the parts. It evidently consists in exciting a new action in the organs affected by promoting absorption and thus eliminating the disease through the various emunctories of the system.

An
Inaugural Dissertation
On
Erysipelas.

Submitted to the Examination
Of the
Provost Regents & Faculty of Physic
Of the
University of Maryland;
For the Degree
Of
Doctor of Medicine,

By
Henry Scott Thruston
Of
Cumberland — Maryland.

1864.

Erysipelas.

I propose at this time to treat upon this most singular and interesting species of inflammation.

It is a most remarkable disease, affecting the superficial circulatory organs, cellular tissue and skin.

It is truly an ailing "Sui generis."

It is a disease characterized, at different periods, and under different circumstances, by pain, heat, edema, swelling, tingling sensation, desquamation of cuticle, and disorganization of the cellular tissue of the part affected, when it assumes the phlegmonous character.

It is truly one of the exanthematous family of diseases.

It is dependent for its action, upon

the existence of a specific poison, concerning which but little is known.

Erysipelas is by no means a new disease, nor do I believe any other abnormal condition of the physical system to be of recent origin –

All that partakes of late style is, our attention to, and acquaintance with, their leading features; their history origin, lesions, stages, diagnosis, prognosis and treatment:

– This then ~~is~~ all unveils obscure diseases of their robe of mystery, of their character of remoteness –

Why should not, and did not, Erysipelas exist – throughout all past ages, in common, with numerous other diseases which afflict-

and derange our physical economy?
I, for my part, have no doubt it did.
Though we may be, and I expect frequently are led into an error, by the term being improperly and carelessly applied to various kinds of inflammation which are totally divest of the most remote symptom of Erysipelas.
It is well enough to apply the term Erysipelatous, to some varieties of inflammation; but, does that constitute such inflammation a true type of any form of Erysipelas? Certainly not.
By such errors, I presume we are frequently misled; let us, therefore, refrain from falling into any such an abyss of error, lest in the end we decieve

ourselves, and attempt blindly to treat Eczema or Erythema for Erysipelas, and "vice versa".

The symptoms of Erysipelas, <u>save one</u>, are likely to accompany many other fully developed forms of inflammation, of a superficial character,

This <u>one</u> excepted symptom, is the temporary disappearance of the redness upon pressure being applied to it, and an almost instantaneous return, of this redness, pressure being removed.

And this characteristic feature, forms a very prominent and reliable diagnostic ~~points~~ in ascertaining the true nature of the disease.

Erysipelas often exhausts itself upon the

part which it first elects for its appearance; and frequently it extends its ravages to almost all parts of the external body.

Is Erysipelas contagious?

This is a query, of no little interest too, which quite naturally propounds itself to us.

So far, as our knowledge at the present day, extends, we can only state that this remains with us an undecided point. It no doubt can be rendered contagious, for I believe that a want of proper Hygienic care — such as ill-ventilation, contaminated & illy conditioned atmosphere and like circumstances, — would render the diffusion of the poison, a thing

quite practicable, by reducing the condition of normal physical strength, to a puny, anaemic susceptible + sensitive character of disposition.

You do not thus only increase its energetic action - (if it is contagious?) but you throw into such a depraved and unhealthy condition, the inmates of the Ward, or Hospital, or room, where the disease may be, as to render them liable to it in its most active and virulent form -

It is my firm impression that Erysipelas is a disease, the diffusion + infection of which, may be altogether avoided by proper and timely care, such as proper tonic and prophylactic means, supported by good ventilation and safe nutritious diet:

Some of the Peculiar Characteristics
of Erysipelas.

These are not a few in number.
Some few of those most generally & prominently displaying themselves will I enumerate.
An attack of Erysipelas may be invited, or rather the developement of it may be caused by the merest abrasion of the integument that can be made, or it may be caused by the most extensive lesion which can befall us to sever the continuity of any portion of our physical construction.
Another peculiarity is, that sometimes, and indeed quite often a most aggravated case will yield its revengeful intentions to the curative properties of the mildest remedies;

when again, we will see frequently the mildest-case apt-to spontaneously disappear, or we may see just-a like case persistently resist-the energetic action of very powerful remedies.

Erysipelas is a frequent-sequel to Dyspepsia.

I saw a case of Phlegmonous Erysipelas follow the application of Liq-Ferri Per Sulph, as a styptic, in a case of amputation of the fore-arm.

I was informed, this last-summer, by a medical gentleman of very enviable ability and practice, living in the "Bedford Valley" of Penna- that an attack of Erysipelas, followed the occurrence of Puerperal convulsions, in a case of Midwifery which he then had in hand -

I experienced an active & malignant attack of phlegmonous erysipelas of the left-forearm following a severe strain of the wrist-joint which I recieved from a severe fall -
Of the treatment of my own case I will speak when I come to this portion of my dissertation -
I knew upon one occasion, not more than six months ago, of an attack of the simple form of the disease in question, to supervene upon a dreadful nervous shock & scare which a young lady recieved by being rushed upon by a huge dog -
She was nineteen years old, & her parents stated, that she never had had it before

in her life.

The dog did not bite her — nor even commit the most delicate abrasion of the dermis.

From the last mentioned case I should surmise that a depreciation of nervous power is a most auspicious cause, for the (cause or) development of the disease which constitutes the theme of my deliberation.

How does Erysipelas become Phlegmonous?

This too is a question of no minor importance to ~~us as~~ practitioners of the "Healing Art".

My reasoning of this question would be simply this — viz.

The occurrence of the simple form of Erysipelas interrupts the functions of the capillary, or superficially located circulatory organs or vessels.

This being the case, those parts which are naturally nourished by these vessels become devoid or deprived of sufficient healthy secretion or nutrition from them, to remain in a normal condition under.

Like any other organ, being deprived of its means of support, it languishes perishes and becomes a foreign substance, & in this condition is thrown off by the healthy surrounding parts which still remain in proper tone, and with a sufficient amount of nutritive action going on in and around them to allow and cause them perfectly and naturally to perform their unimpaired functions without interruption —

This action, then, of seperation, of morbid from living bodies constitutes Phlegmonous, Phlegmonoid, or as I have heard it improperly termed, ~~[illegible]~~ Gangrenous Erysipelas. The dead or sloughing parts form the substance of those foul, offensive Ulcers which in such cases disgust our sight, and when in certain localities, become, as often they really do, such formidable barriers and opponents to our every energetic effort to restore to its former tone the part so grievously afflicted.

Diagnosis.

This is, as a matter of course, in this disease, what it is in all others to us, viz. the information which we should perfectly possess, ere we begin to tamper

and meddle with a disease; concerning the cardinal points and prominent symptoms of which we are totally ignorant. Fortunately, we have in Erysipelas a disease of no difficult diagnostic features. Erysipelas is a disease in this way holding out to us the great advantage of divesting ourselves of all doubt in ascertaining its true nature, without which we could do nothing in any disease to result as we desire, and there is a strong probability that if we attempted blindly to put ourselves to work to arrest its course and progress, we should do far more harm than good, for among other of its peculiar characteristics is one which bids us beware,

and cautions and that is a silent knowledge of the fact that if injudiciously managed in the first instance — we only promote the unhappy result we would ever ardently avert — viz its onward destructive march towards the weakening and diseasing of our most bounteous gift of God — a sound physical constitution

As prominent diagnostic points in discriminating between Erysipelas and other diseases of similar appearance I would mention the fact that there is, in Erysipelas generally a premonitory cousiet of symptoms, and to this order of symptoms belong a SORE THROAT, sensations of langour, chilliness and thorough relax—

ation of the system -
The active attack frequently is ushered in with a distinct chill - the pulse ~~pulse~~ being rapid, and rigid from the start - Frequently derangement of the alimentary canal occurs - Diarrhoea - for instance.
Nausea and Vomiting are not infrequent accompaniments, the Stomach often remaining destitute of tone and strength for a considerable time - the digestive organs entirely impaired for the time -
(It is on account of the last mentioned symptoms that Dyspepsia is understood to act as an exciting and sustaining cause of Erysipelas, so often,

and no doubt, but it justly merits to have this stigma laid to its indebtedness) Next we find some distinct small spot on the ear tip or side of nose, or on the forehead or cheek to become rigid, hot, slightly, ~~slightly~~ painful, and subsequently hard and swollen — or, if it be a case in which the disease has been caused by a wound, it is just as apt to originate within the immediate vicinity of the wound — but on that account not diverging materially from the preceedingly described course of symptoms The swelling and redness gradually extend and spread themselves with a slightly raised margin, and proceeding on in this way until an entire face-

scalp - hint or trunk constitutes a continuous mass or sheet of the fiery inflammation ordinarily known as Erysipelas. Frequently the oedematous swelling amounts to such an extent in the eyelids, and often in the entire face or head as to swell into such a perfect state of disfiguration & condition of disguise, a familiar countenance, which when viewed under these circumstances would never seem as though you could recognize features of any former acquaintance of eminently prepossessing character. The only other monstrous disease which is unmerciful enough to deprive an essentially ugly person of what little natural capital of good looks he might accidentally possess, is the

confluent form of Small Pox — and what better could be expected of a disease which required such a term as "POX, to give it an habitation and a name".

— Some few days after the existence and continuation of the symptoms just mentioned in review, these hot, red and swollen parts, assume a puffy raised appearance and become collections of little blisters, or an expanse of bullae, almost confluent, & filled with ~~with~~ a sero-sanious liquid —

— These frequently burst spontaneously, and waste their contents on the already diseased parts, only to give rise to a recurrence of the same condition of affairs —

Erysipelas is quite a painful disease —

It is recognised both as a Medical and Surgical disease -
Dr Walson treats of it, as a Medical disease
Dr Groff treats of it, as a Surgical disease.

Prognosis.

This, as would readily seem apparent to any ordinarily logical mind, must depend on various circumstances, one of which is the stage of the disease, when our attention is first called to the case; and one, among the other various considerations is, to what treatment the patient has been subjected previously to our having been consulted.. Our prognosis, here too, would in a manner depend upon what embarrassing complications were directly or indirectly associated.

with the Erysipelas.

Somewhat too would it depend on the character of the cause which gave rise to the attack. If preceded by a wound, then would the nature size & locality of such bodily wound or injury, constitute a grave feature in our prognosis.

Erysipelas, therefore sometimes becomes a most embarrassing, and often an entirely uncontrolable disease to manage. It will, on many occasions, baffle the most attentive, experienced or interested practitioner, from the fact of its origin being quite obscure, & on this account giving rise to repeated attacks, supervening, one upon the immediate cessation of its predecessor, and frequently

from its being associated with such appalling and unmanageable complications as often accompany it—; and then again on account of such terrible sequelae, as often creep on in the most subtle and unsuspicious way— as effusion in the cavity of the cranium, internal abscesses, coma, delirium — (and death) —

Therefore, from the first, would I most assiduously watch a case of Erysipelas, and treat the same coolly & deliberately, not losing sight of the liability of my encouragement & ardour being subject to defeat—, from some unseen feature insinuatingly introducing itself between the disease I wish to conquer,

and my self, as the means designated to oppose and annihilate the enemy.

The idiopathic form is generally the most dangerous kind, because it ordinarily selects the head, or some part of it, as the seat of its destructive operations —

It is in these cases where we are most apt to have effusion within the cavities of the skull — such effusion usually occurs beneath the arachnoid membrane.

It is in these cases where we are most apt to have syncope, coma & death.

Traumatic erysipelas, is that form of the disease which occurs in the regions of wounds.

The next important consideration which most naturally claims our attention is —

The Treatment of Erysipelas.

The indications which we are here to fulfil, are four in number—, to wit—

1st. To restore tone and circulatory vigor to the affected part:

2nd. To build up the constitution by proper tonic, dietetic + prophylactic treatment so as to fortify it against the ravages which the poison, already has, or may inflict, upon the physical economy

3rd. To so continue our last-named treatment, for a time after recovery, as to prevent a return of the unwelcome visitor—

4th + lastly, to treat complications as they arise, as though they did not constitute a complication, but as though they existed alone —

For the accomplishing of the first-effort, viz that of restoring tone & circulating vigor to the part affected, we have, fortunately, acceptable a number of resources. Very often, if the disease be taken in time, the application of some cooling astringent lotion will completely break it up, and for this purpose we might avail ourselves of the use of rags saturated in a solution of the Acetate of Lead — or, of one of the Sulphates of Zinc, Copper or Iron; using, according to the selection, from ten grains to one dram of the salt: or we might use instead, the Watery Solution of Opium, or the Infusion of Lead and Opium — or again, we might use some mildly stimulating ointment, such as fresh hogs lard and

Oxide of Zinc, or Olive Oil and Oxide of Zinc; or even a liniment of Linseed Oil, Oil of Turpentine and Lime Water –
Often washing the affected part with Farina or Flour will help greatly to reduce inflammation –
Along with these topical applications, we are to use some tonic and supporting constitutional treatment – We are to have a due regard to the healthy condition of the alimentary canal; also to see that the digestive functions to not become deranged – to cause febrile action to abate – and to procure for the patient, his natural amount of sleep – and quiet rest –; and by obeying these injunctions last enumerated, we will be correctly complying with the requirements in the fol-

filment of the second and third indications of our course of treatment.

If the bowels are costive, it would be well to use some mild laxative, as, for instance, a pill composed of Comp. Ext. of Colocynth and Calomel, each ten grains.

For by this means we would not only be regulating and relieving the offices of bowels, but thereby would accomplish the removal of a great and never failing source and cause of fever.

To procure rest we may have recourse to Dover's Powder, ten grains, or even fifteen, and if fever be high we may with much propriety, add ten grains of Nitrate of Potash. This compound powder to be used at bed time, or oftener if necessary — and we find it to afford relief — which it will doubtless do.

—If we find that this powder of Nitrate of Pot-ash and Dovers Powder should exercise too costive a tendency we may abandon it, and appeal to the quiescent effect of a couple of grains of Extract of Hyosciamus, or a fluid dram of Nitrous spirits of Ether (Hoffmanns Anodyne), or even, if preferred, to five or ten grains of Extract of Hemmulus.
The amount of febrile action, the sensitive or confined condition of the stomach and digestive organs, generally and of the alimentary canal must call into lively action our discretionary powers—
As time and prophylactic treatment we may usefully ingest the Sind Chloride of Iron, three times a day, with infusion, or five grains of Sulphate of Quinine quite as often, or

Some of the bitter vegetable tonics as Quassia Prunus Virginiani, Gentian. Columbo — or Peruvian Bark — either in form of Tincture or Infusion — or again, we may use that reliable preparation known as "Quevenne's Iron", which is simply Iron reduced by the action of Hydrogen — or Iron Powder. If more energetic local or topical applications are demanded — on account of the disease having progressed considerably, or in case we do not see it until it has arrived at quite an advanced stage, we may upon the authority of Prof. N.R. Smith — coat the affected part with the Tinct. Muriate of Iron; or upon the authority of our lamented late Professor of Practice, Dr. Sam Chew — we may use Tincture of Perrin.

or a strong solution of the nitrate of silver, Prof. Rich. Thos. Hey, also endorses this. Dr. Muilhollany, of the Baltimore Infirmary, practices innoculation with the ointment of Prof. Hogg's lard, and the oxide of zinc. Dr. Thos. A. Healey, formerly of Cincinnati, Ohio (but now Med. Director in the U.S. Army), used to prescribe that the border, or margin of the inflammation, should be circumscribed with a saturate solution of the nitrate of silver; (gr. LX, to Water ℥j.) and then to paint the within inscribed inflamed surface with Tincture of Iodine. Dr. S. P. Smith, of Cincinnati, Ohio, my honored and venerable preceptor directs that the entire inflamed surface be painted with a strong solution of the nitrate of silver.

Of course, the Topical Treatment alone, has been referred to, in quoting those professional gentlemen's practice —

Surg. Jas. H. Oliver of U.S. Vols. makes use of a solution of Sulph. Zinc and Laudanum. I take it that I will be expected to present, for your criticism, the course of treatment which I should adopt in taking in hand a case of Erysipelas which had already begun the curative effect of a palliative course of treatment.

I should of course, if bullae, or blisters had formed, puncture them and so evacuate their (watery) contents — if external or superficial abscesses had formed I should do likewise; and in either case, follow up the evacuation of the fluids — with the application of an

emollient poultice, to promote the pustular discharge of the yet secreted & retained effete matter. For this purpose, I should use Bread & Milk — Slippery Elm or Flaxseed.

— If these means were not considered necessary by the presence of bullae blisters or abscesses, — I should proceed to paint the affected part with a solution of Nitrate of Silver, of the strength of forty to sixty grains of the salt, to the ounce of water —

— If the bowels were disposed to be costive, — I should regulate the same (as often as necessary) with some mild unirritating laxative as Castor Oil, an ounce or ounce and a half —, or would use for this purpose a pill of Calomel and Rhubarb — of ten grains each — or one of Calomel Rhubarb and Compound Extract of Colocynth five gr —

ains each -

If bowels were too free - I should use a compound anodyne powder, of Tannic Acid and Opium, each one grain, combined with Prepared Chalk, two grains — or simply anodyne pills of Opium alone - strength one grain each; and would use such powder or pill, once every third, fourth or sixth hour, as the case required, until relief was obtained.

I should procure rest by Tincture of Opium, by giving from thirty to sixty drops, at bed time, or by Dover's Powder and Nitrate of Potash, each ten grains, or, if this constipates, I should use Extract of Hyoscyamus, two grains combined with Oxide of Zinc three grains.

The diet here, as in all cases of Erysipelas, should be light and nutritious, principally

of a farinaceous character — such as — Rice and Milk — Arrow-Root — Sago — Tapioca, Rice Pudding — Blanc-Mange or Milk Soup, if meat be used at all, let it be a little veal, boiled with rice — the latter, however, in no case to be used ~~in a case~~ where there is a tendency to diarrhoea —

I should use as tonic means, Ammiak Tincture of Iron — Quinine, or Ripleir drops, well diluted with water, about one half hour after each meal — so that it will assimilate well with the nutritive portion of the food & thus be perfectly diffused through the system, and yet, I not introduce it so soon after or before eating — as to have it coming off with articles quite easily susceptible of digestion.

Or I might use Pulverized Iron or Sulphate of Quinine, or both, taking five grains of each thrice daily; Or I could use Carbonate of Iron or some one of the bitter vegetable tonics as prophylactic treatment, I should continue the tonic treatment, Quinine & Iron, and use Bark Tea - Belladonna - generous diet, good ventilation, & good sense in avoiding having my patient relapse from any such source of negligence as cold drafts of air, or other like inauspicious influences —.

In the event of the case assuming a Phlegmonous or Gangrenous character, I would vigorously push my tonic and prophylactic treatment, and use more

irritating active topical applications —
— I should act as though it were a case of
Gangrenous character, arising from any other
cause —
— I would touch margin of Ulcers with Muriate
Tincture of Iron — Nitrate of Silver,
or Nitric Acid — or possibly with the Sulphate
of Copper.
— I would use active antiseptics, such as
Bran — Yeast — Charcoal, Lime Water, Oils
of Linseed — Turpentine & Olives — or I would
apply the Permanganate of Potash, in the form
of weak Solution — It being a very powerful
remedy — I should use it with the greatest care.
— I would make it of the strength of one grain
(fluid) of the preparation, to the pint of
water — Rags to be saturated with this and applied

directly to the ulcerated surface.
In case the disease showed any tendency
towards the head, I should make use of
sedatives, antispasmodics & just such
stimulants as would, in the premises,
least be apt to accelerate cerebral disorganization.
If there was great plethora I should bleed
from the arm — or take blood by cupping or
leeches from the back of the neck or
scalp — shave off hair & apply blisters
of pounded ice — & such other antiphlogistic agents as would seem proper —
I would not tax my patient by making
a chemical laboratory of him, by dosing him
with a superabundance of useless & injurious
medicines, lest any officiousness and over
treatment should prostrate him more than

the disease itself—

My own case of Phlegmonous Erysipelas which I suffered upon receiving an injury of my left wrist-joint, for a long time resisted all attempts & efforts at a curative course of treatment, until I was accidentally advised to apply a cold poultice of raw Cranberries—mashed—

I did so, and in two or three days was on the road to rapid recovery—I continued on in this way, & without the assistance of any other topical treatment, at the end of a week found myself well—

My case was not a slight one, for I had two very considerable sloughing ulcers on my fore-arm—directly above the strain.

I attributed the salutary influence of the

poultice, in this case, to the mild cooling and astringent character of the juice which the Cranberries contained — Was it not Citric Acid? I think so. The expression would not rage saturated in Cranberry juice & topically applied in any form of the disease be worth a trial — ? I am inclined to think they would. — The favourite treatment of simple forms of Erysipelas, usually in its early stage, by Dr. Ormond Sullivan, a most respectable practising physician of this city, (& now an Acting Asst. Surg. in the Camden Street Hospital, also in this city) is simply promptly to blister the entire inflamed surface with Spanish Fly Ointment, upon first appearance of the redness —

I have repeatedly seen Dr Waters use this simple treatment, and am yet to hear of its ever having failed. On the contrary, it seems to act with an almost perfectly magic influence, quickly dispelling even the faintest remaining appearance of the disease —

Of course Dr Waters uses collateral constitutional treatment, the action of which, the counter irritating properties of the blister, seems greatly to facilitate. He always took the disease in its early stage.

Conclusion.

I must now close my treatise on erysipelas, which I have written without the aid of a text-book or consultation with ~~with~~ any man on the subject since first I took my pen in hand to begin

my dissertation –
It comes from a purely unassisted source,
and if I have done my subject justice
I am highly gratified and fully re-
quited by the enjoyment of so satisfac-
tory a reflection –
Though it appears an edifying idea to
the mind I should feel eminently com-
plimented –;
But if I have not, justice done to the theme
of my thesis it was from no want
of desire, or effort on my part, and
I must seek what consolation I can
find in the regretfull impression that
it ought to have been better.

An
Inaugural Dissertation
on the
Differential Diagnosis
between
Typhoid and Typhus Fevers,
Submitted to the examination
of the
Provost, Regents & Faculty of Physic
of the
University of Maryland,
for the
Degree of Doctor of Medicine,
by
George H. Lewis,
of
Virginia.
1864.

Differential Diagnosis
between
Typhoid and Typhus fevers.

Under the title of common continued fe-
-ver, the two febrile affections now known as typhoid
and typhus fevers were for a long time confounded.
By the older writers they were looked upon as es-
-sentially one and the same affection, and their non-
identity was not clearly proved, until at a comparat-
-ively recent period. In our own country, as well
as in England, this error was practised and incul-
-cated, until the able researches of numerous investi-
-gators fully determined the distinct characters of the
two diseases.

Nor is it surprising that such should have
been the fact: They have much in common likely

to lead to an error of this kind. Now that we can appreciate the distinct characteristics of the two diseases, there is nothing calculated to mislead our opinions in the one or other case; but when these natures were involved in deep obscurity, it is not surprising that they should have been looked upon as types or grades of one common affection.

In their general appearances we are struck with the similarity presented by their symptoms. We observe in both the same evidences of continued fever action, the same contamination and depression of the vital powers, and the same steady and inevitable march towards again that they have tendencies to similar complications, that they are both often attended with more or less thoracic embarrassment, and that each is characterized by an eruption on the skin.

When we consider the conditions from which they spring,

we find another excuse for this peculiar error. We find them generated in situations where human beings are crowded together, with insufficient and unwholesome food and confined and vitiated air — in ships, in camps, in prisons, and in ill-ventilated hospitals — in a word, that they result from an <u>animal poison</u>. In the intensity or amount of this poison necessary to the production of each disease, there may be a wide grade of difference; but this does not weaken the grounds upon which they based their error.

Of <u>the essential natures</u> of the two diseases, we know comparatively little; but so far as our knowledge goes, we cannot safely draw the line of demarcation between them. As in the causes of the two diseases, there may be a wide grade of difference, which we are not yet capable of measuring, or even appreciating with any degree of certainty. We find the same depravity of blood

and the same evidences of contamination generally, but there are no peculiar lesions which account for these phenomena, or explain satisfactorily the action of these causes.

Finally, in the treatment we are met by similar indications. They are both characterized by the same obstinacy to the impression of remedial measures, and the same demand for early support and stimulation. It is true, that one may call for these means at an earlier period than the other; but in other diseases the periods at which these measures are necessary, vary greatly in different cases and under different circumstances. Again, we find a similar inability to support the due action of the remedial measure, which preys upon the vital energies at large.

Nor even at the present day, though we have learned to separate the peculiarities of each disease with some

degree of certainty, do we always find it easy to distinguish them with absolute precision. The symptoms of each may be more or less mingled in the same case, and, as Rev. Wood has suggested, it is highly probable that the two now and then exist conjointly.

Nevertheless, they are quite distinct, and are characterized by peculiarities essentially different; and as the late Prof Shew has remarked, the one has never been known to give place to the other, or indeed to extend by contagion. Ample investigation has led to the establishment of a pretty accurate diagnosis in their respective phenomena; and it is to Rev. Gerhard of Philadelphia, that the profession is mainly indebted for the first position proof upon this important subject. Rev. Lemen and others of England subsequently added additional evidence in support of the conclusion; and so well established has it now become, that the old error

is no longer maintained. The two diseases are admitted on all hands to be quite distinct, and to differ widely and essentially in their course, duration and fatality.

In their modes of attack, we meet with great diversity; but waiving the exceptions which may now and then occur in different cases, we can establish a pretty safe rule in regard to the onset of each disease. Thus, typhoid comes on more gradually, more insidiously, and following a train of symptoms, more or less marked in different cases. Most generally it is preceded by premonitory symptoms, and advances so gradually as to preclude any certainty of fixing upon its exact period of commencement. The patient will complain of feeling unwell, without being able to ~~account~~ explain the cause perhaps, or to assign any particular symptom to account for his derangement. He may even pursue his ordinary avocations. To this may be added general uneasiness or lassitude,

Paleness or stiffness of the limbs, and slight headache, especially upon rising in the morning. The tongue is often coated with a thin, whitish fur; the appetite unimpaired; the pulse slightly accelerated, and the face somewhat flushed. Chilly sensations may alternate with flushings of heat; and these symptoms gradually increase, for a period varying from one or two days to a week or more. Generally, during this stage, the bowels are affected with diarrhoea, or a considerable tendency towards it, as evinced by the extraordinary susceptibility of the bowels to the action of any cathartic medicine.

On the other hand, it often more frequently begins abruptly, being ushered in by a decided chill, which is often characterized by violent shiverings, and during which the patient may die, before the system has had time to react from its exceeding prostration. When reaction has taken place, the temperature is more burning and tingling

the heat being of that peculiar kind usually called Calor mordax or mordicans, which imparts to the hand a sense of pungency; and the bowels, instead of being affected with diarrhoea, are usually constipated. The complexion is of a darker red, the mind more apathetic, stupid and indifferent, and the expression of the features more perplexed or obtuse.

According to Dr. Wood, hypochondriacs is rarely absent in typhoid fever. It usually comes on about the second day, or as early as the third; and though it exists at first, increases as the disease advances, in proportion to the severity of the symptoms. It is often so enormous as to interfere with respiration, by embarrassing the movements of the diaphragm, and by preventing the bowels from acting upon them freely, through their distension. This collection of air is referred chiefly to the colon, the small intestines being rarely affected.

in this way. In its kindred affection, typhus, the abdomen is usually flat, or sometimes tub-shaped, but never tympanitic. This is a very important fact, for it reveals at once the true condition of the enteric affection in the one, or its absence in the other.

In typhoid, also, we are apt to discover tenderness in the right iliac region, especially about the situation of the caecum, and a slight gurgling movement upon pressure with the hand, which is evidently due to the intermixture of liquid and gas in the bowel. Later in the disease, this symptom is more common; but it rarely, if ever, occurs in typhus. And in the nature of the evacuations, there is also a wide grade of difference. The bowels in typhus generally are usually constipated, but according to Murchison, the thin, watery, pea soup stools of typhoid, are quite peculiar to that disease. Indeed, some form

of diarrhoea is almost always present in this affection. It may be slight in many cases, but I believe when absent that there is usually a considerable tendency towards it, which may be readily aroused by the action of any cathartic agent. A small dose of sulphate of magnesia, or of castor oil, or a single sedative powder is generally all that is required in such cases to produce a free evacuation.

There is another peculiarity in this disease, which depends primarily no doubt upon the same internal condition. I allude to haemorrhage from the bowels. This is a very important symptom. It often occurs unexpectedly, sometimes in considerable quantity, and rapidly exhausts the patient; or it may recur at intervals, wasting his strength more slowly, but surely too. It arises, probably in most cases, upon the rection or opening of one of the mesenteric veins by ulceration. Blood may thus be poured into the

intestine without being voided. Anal relapses occur, in which after sudden and unexpected death, at an advanced period of the disease, large clots of blood were found in the lower two-thirds of the small intestines, which had never passed the ileo-caecal valve. Epistaxis also frequently occurs, and has always been marked as very characteristic. Not in typhus, the latter haemorrhage scarcely ever occurs; the former almost never.

In the respective eruptions of the two fevers, the difference is still more remarkable, both in regard to the periods at which they appear, and the phenomena which they present. Thus in typhus the eruption appears earlier, from the fourth to the eighth day — while the rose-spots of typhoid generally make their appearance during the course of the second week. The former are more numerous, confined to no special locality, and present different appear-

-ances in different conditions; the latter are confined al-
-most exclusively to certain localities, and present the
same appearances in all cases.

But they differ more widely in their sensible char-
-acteristics. The rose-spots of typhoid fever are papular
or pimply, of a red color, and in all stages disappear
readily under pressure. They are usually about a line in
diameter, and are often slightly prominent. They usually
appear between the seventh and fourteenth days, though
more rarely they are not seen until near the close of the dis-
-ease. They are usually confined to the abdomen, though oc-
-casionally extending, however, to the breast and shoulders. Each
crop lasts from three to four days, and then fades to give place
to additional ones. They have not been discovered in all ca-
-ses of the disease, but from the fugitive character which
they present, I am inclined to think with Dr. Wood, that
they are often only overlooked, when they are supposed to be

wanting.

The eruption of typhus, to which the name of mulberry rash was given by her. I am sure, is in striking contrast with that already described. It consists in numerous reddish blotches, varying considerably in size, and but very slightly, if at all elevated above the surface. They are variously colored, red, purplish, violet or almost black, the color bearing some degree of proportion to the stage and severity of the disease. These spots do not usually disappear under pressure, and often of a dark purple, so that some are totally unaffected by it. Petechiæ, and occasionally minute red spots, are mingled with them. This mulberry eruption has suggested the title of "spotted fever", by which the disease was at one time commonly known.

There is said to be a considerable difference, also, in the respective odors of the skin during the course of the two

disease. Thus, in typhoid it is said to have a peculiar musty smell when dry, and acid when wet; and perhaps all who have seen much of the disease are ready to admit that there is some truth in the statement. On the other hand, the odor in typhus is decidedly unnoticeable, whether the skin be dry or moist, and is said to resemble very much that which emanates from rooms, where many sick persons are crowded together, and no respect is paid to ventilation.

There is an appreciable difference worthy of note in the thoracic complications which in fact attend the two fevers. In typhoid, cough and bronchitic rales are common at some period in the course of the disease. The cough may be dry, or accompanied with a scanty expectoration of mucous; but with very little soreness or oppression of the chest. The dry sonorous and sibilant rales may be heard more or less extensively over the thorax and

are much greater in proportion to the amount of dyspnoea, than in ordinary catarrhal affections. Moreover, they begin with the disease, but more generally appear during the second week. In typhus fever, percussion often reveals consolidation of the posterior part of the lung; or if signs of bronchitis have existed, they are apt to give way to a crepitant or subcrepitant rale, indicating the occurrence of inflammation in the parenchyma of the lung.

The urine is changed from its normal condition in both diseases; but there is a difference quite appreciable in each case. In typhoid, according to M. Tonnelé, it is higher colored and denser than in health; and Dr. Begbie of Edinburgh, found that it was often albuminous in the latter stages, and that it continues so until death. According to Mr. G. W. Edwards, who has paid particular attention to this subject, it is destitute of albumen in the earlier stages, and this does not appear, he thinks, until

the crisis is past. In typhus, however, according to the same author, it is pale, of a low spec. gravity, and uniformly albuminous in the early stages.

The duration of the two diseases is exceedingly variable, but from the average of their respective courses, we find that typhus runs its course more rapidly than typhoid. In, in the latter, death as early as the seventh day is exceedingly rare. More generally it occurs in the course of the second ~~week~~ or third week, and sometimes not until the end of six weeks, or even later. Convalescence rarely begins before the third week; and even the mildest cases run on to the fourteenth or fifteenth day. The average duration may be held, perhaps, at from twenty to thirty days. In typhus, fatal cases may terminate at any time. Sometimes, when mild, it runs its course in six or seven days; and in violent cases death may occur in the first twenty-four hours, even before reaction has been fairly established. More commonly, however, it lasts, at least

during the second week, and is most frequent from the ninth to the twelfth day. Not unfrequently in this disease convalescence is ushered in by some attempt on the part of the system to relieve itself of its contamination. Thus a copious perspiration, or an unusual secretion of urine, is followed by a marked amelioration in the symptoms, the patient falls into a gentle sleep, which is followed by a return of consciousness, and a marked improvement in every respect. This condition is never observed in typhoid. Convalescence begins so gradually that it is often impossible to date its precise period of commencement. It is not ushered in by any increased activity in the secreting apparatus, or any marked amelioration in the general symptoms; and the condition of the tongue is often the first observable indication of a favorable turn in the progress of the complaint.

But when we consider the pathology of the two diseases, we are no longer left in doubt. The essential lesions of typhoid fever are quite peculiar to that disease,

and have been justly considered pathognomonic of its existence. In a post mortem examination where we can discover these anatomical changes, we can pronounce with as much certainty that typhoid fever had existed, as would be warranted by the peculiar eruption of small pox, as an indication of that affection. The most important of these lesions is softening, and subsequent ulceration of the agminate or Peyerian patches, which are numerously scattered in the lower two-thirds of the ileum. These glands have been noticed in all stages of the disease, after the sixth day. The ulceration consists in thickening and elevation of their edges, which does not seem due to any foregone inflammation, but to the deposition of a peculiar dark matter from the blood which has been called typhous or typhoid matter. Some of these patches are dark red, some pale, and others of an intermediate hue. Louis describes two varieties, which he distinguishes by the names of red and white. The former may undergo resolution or ulceration, but the latter always ulcerate. They are often

found stained yellow, as it were by the watery discharge from the bowels or the bile which accompanies them. Sometimes one or more of these ulcers perforates the intestines, and forms communication with the peritoneal cavity. This occurs most frequently in the vicinity of the caecum, as there ulcers are further advanced than others higher up in the ileum. This perforation may result from ulceration alone, from mortification of the exposed peritoneal membrane, or by its rupture from force applied within the bowel. When healing however is to heal; and when they take on this process, the edges become adhesive, the centre is filled up with healthy granulations, and a new mucous membrane is gradually developed.

The solitary glands of the ileum, often conformed with the duodenal glands, or glands of Brunner, are often affected in the same manner. It is asserted in some rare instances that these glands alone were diseased, but I believe this is rarely if ever the case. The mesenteric glands are frequently found in a diseased condition also, characterized

by redness, swelling and hardening, and sometimes exhibiting traces of pus. Perhaps the inflammation of these glands is secondary, and dependent upon the condition of the ulcers, to which they stand in relation.

Syphilis fever has no constant lesion. It is true that there is one frequent, usually visible in post mortem examinations, but it is questionable whether this may be considered entirely characteristic, viz: a want of coagulability in the blood, and the petechial eruption. All other lesions may be considered incidental. The glands of Peyer, in uncomplicated cases, are never ulcerated, but always found quite healthy, in the febrile epidemic which prevailed in 1847, and prevailed principally among the black population of that city, the results of post mortems were uniform with a few exceptions, but no softening or ulceration could be detected in these glands.

Typhus fever never prevails as an epidemic. It is true that it sometimes appears in a family, spreading within

age not rare, and thus presenting many evidences of a contagious epidemic; but these cases are rare. We can easily understand why a family partaking of little susceptibilities and exposures should fall a similar result, without referring the cause to any other source. When it generally occurs, however, it presents the ordinary appearances of an endemic, and is governed by the same laws. It has been known to supersede previous endemic affections, becoming the endemic from other regions, to have intermittents and remittents succeeded to a considerable extent, and to occasion a belief that typhus has been increasing, since this would explain the [illegible] the [illegible] the conditions favorable to endemic [illegible] of the climate and the habits of the people, and the [illegible] of the disease, while on the other hand, the increase of population, which has long been known to favor continued fevers, usher in the conditions favorable to these affections.

Typhus fever however appears as an epidemic. It is true that it may occasionally present an exception to this rule, but more usually it spreads rapidly, sparing neither age nor sex in its course. It prevailed in this country in Ireland, appearing as early as 1807, reaching Philadelphia in 1812, and lurking in the lanes and alleys of that city until 1817, when it reappeared. It visited that city again in the Spring of 1820, [illegible] more extinguished; not appearing in more than four or five cases in the Pennsylvania Hospital, according to Dr. Wood, during the nine subsequent years. In like manner it has visited nearly all the large cities of the Country, devastating those portions where the miserable poor are crowded together in filthy lanes and alleys, appearing suddenly, it may be, upon the arrival of emigrant ships, or arising spontaneously [illegible] in almshouses, prisons, military barracks, &c., &c.

[illegible] on the latest investigations, modifying the opinion
[illegible] occurrence of the two diseases. Typhoid rarely occurs
in persons beyond thirty years of age, and much more rarely
beyond forty. In 255 cases observed by Louis and by Chomel,
75 were from fifteen to twenty; 75 from twenty to twenty-five;
[illegible] from twenty-five to thirty; [illegible] from thirty to forty,
[illegible] from forty to fifty. [illegible] only [illegible] beyond fifty. [illegible]
greatest liability ranges, [illegible], from fifteen to thirty. Prence
of residence is supposed by European writers to predispose to
the disease, and Dr. James E. Reeves of Virginia, who
has published a work on typhoid fever, asserts that it not
only exerts a considerable influence over the predisposition
thereto, but over the severity of the attack also.

[illegible] typhoid fever, winter age [illegible],
is much more common in advanced life; and the age of great
[illegible] liability ranges, in [illegible], from [illegible] years.
[illegible] of residence seems to exert little or no influence

over its occurrence. It has been denied that season has anything to do with its occurrence or predisposition. It is true it is generally supposed to be more prevalent in winter, and this no doubt influences some one to so-called explained. The exposure incident to that class of people among whom it is most frequently generated, and the exclusion of fresh air from their wretched hovels to satisfy the demands of social comfort, no doubt exerts a marked influence upon the conditions necessary to its production.

Much has been said in relation to the contagiousness of the disease, and in regard to which the question is still mooted among medical practitioners. Many arguments have been advanced, both in the domestic and foreign literature, in support of this opinion. It is true, that in the ordinary cases of contagion, it is rare. It is true, that it is often known to radiate from a single center through families and even neighborhoods, and much stress has been laid upon this rarely but more frequently, I presume, it has occurred in

isolated cases, without any evidence to prove it was ever transmitted to another individual. The common forms of intermittent or remittent fever, [illegible] though generally seen in isolated cases, they are often found to spread rapidly through families and [illegible] cases, in entire or nearly all, it may be, the same [illegible] condition. Diarrhoea and dysentery frequently appear in the same manner, sparing, it may be, no member of a family when it once reaches them. These [illegible] are not to be explained by [illegible] contagion, [illegible] generally the malady is a poison disseminated through an atmosphere common to all within its noxious influence. Again, some constitutions are naturally more perverse than others, with [illegible] tendency, [illegible] disseminated through all the members of the same family, for example, the scrofulous habit, or the tubercular diathesis. One member of a family may be stricken with pulmonary consumption; a deceased relative who is alive:

constant at the bed-side, administering to the wants of the patient, may have the hereditary and latent tendency awakened by those confinement, fatigue, anxiety, and the depressing emotions, and may thus fall victim to the same disease. These cases are not rare, and if they are never elicited by contagion. Yet it may be in typhoid fever; persons living under the same roof, or in the same district, exposed to the same natural influences, partake in a degree of the same susceptibilities, and under like exposures may suffer similar results.

It has been previously stated that typhoid fever, after first, origin in impure and vitiated air, from animal putrefactions in a state of decomposition — in other words, from an animal poison. Now we can readily understand why it is so often fostered in the wards of our hospitals, and in spite of efforts to the contrary, we find the very conditions propitious to its occurrence. In a vast majority of cases instances, we believe it occurs in isolated cases

[illegible] in these buildings, [illegible] and then individual. Cases may now and then occur in which the nurses and medical attendants are attacked with the fever, but it seems much more reasonable to explain this by the well known effects of impure and vitiated air, constant watching and fatigue, than to [illegible] by a rational theory of contagion. If, on the other hand, contagion be the exciting cause, why, under circumstances so favorable for its propagation, does it occur sporadically, and in isolated cases in these buildings, run its course, and leave no evidence that it had communicated itself to any other patient in the same ward or building.

An argument in favor of contagion has been brought forward, based upon the hypothesis, that typhoid fever, seem like the exanthemata in several prominent features, i.e., in the rose-colored eruption, the thoracic congestions, and the peculiar and in [illegible] cases [illegible] [illegible] [illegible] [illegible] [illegible]

-ed or safely inferred. I do not stop here to discuss; it is at best merely hypothetical, and in the main, it seems very unreasonable to resort to analogical proof, in presence of well known and well established facts to the contrary. That the fugitive character of the proof, contained within an incidental theorizing application, and sentence tight and fence to a place beside made-proof and mere, is treating analogy to a considerable amount, and the argument that the former is preservative against, because the latter two are known to be, in my opinion needs more conclusive evidence.

It is true, that men well skilled in the knowledge of diseases have entertained opinions respecting the contagiousness of this fever, which we are bound to respect; because they have been founded upon extensive observation and experience. Confidence, among them is in total. Perhaps no writer has been more firm in the belief that this fever may be communicated by contagious

If I were called to explain this fact, I should do so upon the presumption that we often confounded the different forms of continued fever, as he himself has authorized to have done, and to have declined his impressions accordingly — At the same instant, since, for the time made, and fatigues. How do I deny that instances, we can adduce, favor the opinion they maintain, but it seems unjust to leave a reasonable explanation of these examples, for one which is, merely on hypothesis. Typhus has been considered contagious, I believe it has been the necessary and natural conditions, favorable to the propagation of the disease.

There are few, however, who deny the contagiousness of typhus. Numerous and well authenticated facts, examples which come under the notice of every medical practitioner wherever the disease prevails, are all evidence of this conclusion, and I am not for pointing the nurses waiting upon the sick, and the medical

illustrations prescribing for them, after contract the disease, and many of them die of it. Indeed, it is asserted in some instances, it has been communicated by the space of months, and then, it has established new centres of infection.

Finally, there is one other distinct peculiarity worthy of remark. Typhoid fever rarely occurs a second time in the same individual. Indeed, according to the late lamented Dr. Samuel Cheever, — whose untimely death in the midst of his useful labors, we have been called upon to mourn — typhoid occurs less often a second time than small-pox.

On the other hand, second attacks of typhus fever are by no means rare, and it appears that no number of recurrences, furnishes any degree of immunity for the future.

An
Inaugural Dissertation
On
Diarrhoea.
Submitted
To
The Provost, Regents & Faculty of
Medicine
Of
The University of Maryland
By
Henry G. Bussey Jr.
Of
Shrewsbury — Pennsylvania
For
The Degree Of
Doctor of Medicine
1864

Diarrhœa

All classes, and sexes are liable to this disease, but youth and old age most. It is characterized by frequent discharges of fecalent matter, [illegible] by a burning [illegible] felt in the abdominal region, accompanied by nausea, and a numbness in the bowels. It is distinguished from Dysentery by the absence of tenesmus, & fever, and by bloody discharges [illegible] and fainting, [illegible] of dysentery [illegible]

charged, which accompanies the whole disease, which however was not attended Diarrhoea, Diarrhoea differs from Cholera not being attended with fever, from Cholera Morbus by the absence of bilious evacuations, and the latter [illegible] and attended with greater loss of strength, Diarrhoea is said to consist in an increased peristaltic motion of the intestines but a mere increased peristaltic motion of the intestines will never produce Diarrhoea; there must be something [illegible]

to produce Diarrhœa, the dis-
charge for exceeds the amount
of matter taken into the Stom-
ach, then the discharge over and
[illegible] is taken [illegible]
the Stomach is the product of
peristaltic secretion, then
Diarrhœa, can only be an ef-
fect of disease. It depends on
[illegible] the [illegible] - gorge; the mucous
lining must be congested to furnish
[illegible] matter [illegible]
[illegible] to the [illegible]
[illegible] Secondly, In the second place,
the mucous must be secreted, and
[illegible] - gorging, and thirdly, there
must be an increased peristal-

[illegible] of the intestinal tube
[illegible] the matter there is called,
peristaltic motion. There
is nothing, more than the
[illegible] of the tube
[illegible], surrounding, there is
[illegible] nothing, more than
[illegible] thousand, and no
[illegible]
[illegible]
[illegible] nothing, more than the sensa-
[illegible]
[illegible] relieve the spasm of the
[illegible]
[illegible] Mucus must be secreted
[illegible] function must depend

Acute Gastric, Diarrhœa is
sometimes Epidemic. Its most com-
mon occurrence is in the summer
seasons when the [illegible]
of the Atmosphere [illegible]
and dry to a [illegible] and colder
[illegible] generally precedes the
occurrence of Diarrhœa. This
disease is not unfrequently [illegible]
[illegible] Acute [illegible]
consists in a weakness
[illegible]
[illegible] action of the Murides. A cold
[illegible]
[illegible] has been in active ope-

tion by warm and dry weather,
suggestive of permanent injury
[illegible]
[illegible]
[illegible]
[illegible]
occasions that just before battle
half a score of the soldiers, while
heat-stroke overwhelming the tas-
[illegible]
[illegible]
the skin always becomes pale,
[illegible] with no other cause, particular-
[illegible]
[illegible] produce. Diarrhœa,
[illegible], which at other times pro-
[illegible]
[illegible]

be something specific in the
[illegible] or some disposing cause,
[illegible] that it is that determines
it, one or the other, I know not,
The cause in the atmosphere
[illegible] by this difference in the
[illegible]
[illegible] constitution of the at-
mosphere, which predispose
[illegible]
[illegible]
[illegible] congestion of the abdominal
viscera in all, the particular
seat of this disease is the
[illegible]

of Diarrhoea as Bilious, Mucous,
Watery, &c, the latter is frequently
by the matters of Dropsy being
absorbed into the system upon the
intestinal surface, by its exhal-
ents, But the effect of all is Tri-
[illegible] The analogies existing be-
[illegible]
[illegible]
[illegible]
the diagnostics, Desquamation from
[illegible] the congested mucous of
the disease, Beyond doubt
there is for most a general en-
[illegible]argement of all the abdomi-
[illegible] viscera. Especially it
[illegible] ulceration and suppura-

Indications of Cure

The great indication of cure is to equalize the circulation, and [illegible] indicate indications, We should [illegible] circulation, and then the cure [illegible] by effecting a general equalization of the blood, and by effecting internal [illegible] of the disease be [illegible] It may be remarked finally by attention to [illegible] that the [illegible]

[illegible] or the Kept in an equable
[illegible] temperature, or at [illegible]
otherwise this mind should
be kept quiet, his diet should
be [illegible] [illegible]
[illegible]
this will also assist in determining to the surface if the irritation
[illegible] not purged and these humiliations discharges or of sufficient
[illegible]
Mild bowels give Calomel or Mercury, give an emetic Cathartic,
[illegible] the Regimen; this is not a febrile
disease [illegible]
[illegible]

degree since [illegible],
because they say it will constrin[illegible]
[illegible]
[illegible]
should not [illegible] the
[illegible]gestion is serious or continues
exhaustion is threatened, with
the visible evacuations, the sul-
phate of Soda, or Castor Oil
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible], irritation, [illegible]

[illegible] Chiquer [illegible]
good [illegible] If the bile
is deficient in quantity or qual-
ity the [illegible] give calomel,
in [illegible] doses to act on
[illegible] if acidities [illegible]
[illegible] in the stomach the
[illegible] result to the [illegible]
[illegible] with the [illegible]
[illegible]
[illegible] or either [illegible] the case
may require, but the [illegible]
[illegible] secretion will in-
[illegible]
[illegible]
[illegible]

before the fire is very [illegible]
it a pleasure to the feet.
also very good, if the dis[illegible]
[illegible] of varicose veins,
the breath, heavy, have to re-
[illegible]
[illegible] accordingly, [illegible]
[illegible] The Water Diarrhoea
[illegible]
[illegible] are cured by the cor-
[illegible], Secretion sometimes
[illegible] Liver, and the Tube. [illegible]
[illegible] excite inflammation
[illegible] if it has, the cause
[illegible]

[illegible]

[illegible] terms to convert to

[illegible]

[illegible]

[illegible] operations of the Dicrotic

[illegible] has been found necessary; the

[illegible] tracings of Sphygmographs, &c. the same are

[illegible] manner by the Sphygmograph, &c.

to be restored to the original

[illegible] size. All the tracings of

[illegible]

[illegible] measurements of tracings

[illegible]

[illegible]

We cannot remove the causes
of Dyspepsia, in the
form of the disease. There
is also congestion. Lime
water produces Diarrhoea
in those who have been
accustomed to hard lime
water. So removing the lime
water, by boiling, and then
filtering the water
in order to obtain a
pleasant taste, the
boiling, deposites the lime
from the water. The former
is deposited in the vessel
[illegible] in
those who live in limes-

[illegible]

[illegible] they are not [illegible]

[illegible] tell the [illegible] is [illegible]

[illegible] flannel is one [illegible]

[illegible]

[illegible]

gives pressure and pro-

[illegible]

[illegible] to be desired.

[illegible]

Yours respectfully [illegible]

Henry G. Bryant M.D.

Pa

An
Inaugural Dissertation
On
Apoplexy.
Submitted to the Examination,
of the
Provost Regent and Faculty of Physic
of the
University of Maryland,
for the degree of Doctor of Medicine
by
G. Harry Brown,
Session 1863 + 4.

Apoplexy (Cerebral)

Apoplexy (from αποπλησσω to Strike)
This term has received various definitions, all differing in some minor point; yet all agreeing in general. It has been defined; Suspension of the animal functions, the vital and natural functions continuing, respiration being generally laborious and frequently attended with sterter. This is Dr Cooke's definition though not quite his language. There are few diseases more intricate, and yet more momentous, than apoplexy: few diseases the proper treatment of which is more delicate, and yet

more important. The mistakes, both in regard to the treatment and pathology, most likely arises from our very limited knowledge of the organ in which it has its seat. We receive very little information or light from the anatomical appearance of the brain after apoplexy, because we are so unacquainted with the natural functions of that organ during health.

Symptoms — The symptoms may be divided into those which are premonitory or warning, and those which occur during the apoplectic state. When premonitory

symptoms are present, which is not universally the case, we generally have the following. Headache more or less severe, vertigo either simple or of that kind called scotodinia, disposition to sleep, loss of memory. The symptom last mentioned is one of the most important of precursory symptoms and should always awaken alarm when it occurs in old persons, particularly if it be in concurrence with drowsiness and headache. This loss of memory is peculiar, and would sometimes, were it not for the awful character of the disease whose approach it foretells, be laughable. Persons thus

affected frequently use inappropriate and ludicrous words. The other precursory symptoms are = injected eyes, flushed face, spasmodic twitching in various parts of the body, inability to articulate perfectly or with freedom - partial loss of sensibility - partial paralysis: the person is sleepy but the sleep is disturbed by dreams; transient deafness and transient blindness.

Symptoms which occur during the apoplectic state — In severe cases voluntary motion, sensation and thought, are suspended. I might almost say extinguished, for they frequently never return.

The patient hears or sees nothing. The tears and the sobs of friends, and the secret smiles of covetous and expectant heirs are alike unheeded - The pulse is irregular; sometimes full and bounding: sometimes weak and almost imperceptible - The eyes are differently affected sometimes and I believe most frequently they are contracted: sometimes however they are largely dilated. Breathing is intirely involuntary and laborious. frequently attended with stertor; this is not universal. In consequence of the flaby condition of the cheeks lips and palate expiration is attended

with a puffing snorting sound. This sound is characteristic, and not likely to be forgotten when once heard, as I myself can testify. The face has often much the appearance of one in a fit of epilepsy; being livid with half arterialized blood. Sometimes it is pale and bloated. The bowels are often torpid and refuse to respond to the most energetic cathartic; but sometimes their contents are evacuated involuntarily. Sometimes the urine also passes without the knowledge or consent of the patient. Frequently the patient is covered with a profuse

sweat. The last three symptoms are looked upon as being of exceeding ill omen. Sometimes the disease is ushered in with vomiting.

As I have said most frequently the patient never recovers from this frightful state; but falls unconsciously into the open arms of near-standing and ever-ready death. Sometimes however we have a train of symptoms similar to the above, but milder in form; then the patient is likely to awaken, it may be to perfect health; but most likely he will be unable to shake off the drowsiness, and his intellect will lie buried in partial slumber.

His limbs, one or more, may be palsied or hemiplegic.

Mode of onset — I have before remarked that premonitory symptoms are not always present. Or if they be they are not always observed. Apoplexy however more frequently, like the storm at sea, gives token of its approach. Sometimes the warning comes in time to "take in sail". Sometimes it is followed so closely by the storm, that the masts fall before the fury of the wind, with sails all spread. Again, the warning may come in time, but the careless sailor may refuse or neglect to take in his canvass and then

the destruction of his ship is certain. So with apoplexy – The person may time to adopt preventative measures, or leave off habits favourable to its production: Or the attack may be suddenly and furiously follow the warning that the person falls in his tracks: Or he may be careless or obstinate, and refuse or neglect to adopt preventative measures, and then he is lost. These warnings are important and so distinctive that they may be observed, and interpreted, even by the intelligent non-professional. Dr Abercrombie [See Watson 268] mentions several methods of onset – In the first form which

Dr Abercrombie calls apoplectic cases - the patient falls suddenly without sense or motion: face flushed pulse slow - breathing stertorous; sometimes convulsions and sometimes rigidity - I have said vomiting is sometimes the first symptom. This happens in Dr Abercrombie's second class of cases which he calls cases not primarily apoplectic. In this form, coma or vomiting is the first symptom generally coma followed by vomiting sometimes the patient falls down with syncope and this is a very bad symptom. Sometimes the coma amounts only to slight drowsiness or confusion. Most frequently the

patient recovers quickly and is able to pursue his ordinary occupations. But when the drowsiness leaves him it is not accompanied by the pain in the head, which still remains. Sooner or later the coma returns — this time deeper and from which the patient is not likely to emerge, at least not in this world, or to mortality. Often there is no paralysis in this form. The third class of cases which Abercrombie calls paralytic is marked in the onset by hemiplegia, loss or suspension of consciousness and faltering in the speech. I witnessed a very marked and

and interesting case of this kind myself several months ago. —
The attack seldom comes on so suddenly in children as in older persons. —
Diagnosis — The general diagnosis of apoplexy is not very difficult; but the diagnosis of the individual varieties is delicate in the extreme.
Dr Eberle (Vol II Page 13) says:
When a loss of consciousness, of sensorial functions and of voluntary motion suddenly come on, and continue with an active state of the pulse, and full respiration, the case must be regarded as one of apoplexy. This may be

correct so far as it goes: all such cases may be cases of apoplexy; but all cases of apoplexy do not present exactly these symptoms: for in some instances both pulse and respiration seem to be intirely suspended. It may be said by some that these cases are universally fatal, and that these symptoms are not the symptoms of apoplexy, but of dissolution. From syncope it may be distinguished by the fullness of the pulse. In coma of apoplexy the blood in the brain alone is motionless, while the heart and circulation continue. In syncope the features are

shrunken and pale; in apoplexy they are usually turgid and livid or if pale they are at least elevated. An appearance very much resembling syncope, in fact it might allmost as well be called syncope, is present in one form of this disease. But in this form unfortunately dissolution is so rapid that diagnosis is rendered almost useless. From natural sleep it may be distinguished by our inability to awaken the patient. In other respects it is quite similar to natural sleep. — From intoxication it may be know by the smell of the breath, the history of the case, and the general —

limberness of the body in drunkenness —

Prognosis — The prognosis of apoplexy is invariably unfavourable It and the diagnosis are inseparable — One known there is not much difficulty in arriving at the other. The class of cases, named by Dr Abercrombie, cases not primarily apoplectic, and in which coma and vomiting are among the first symptoms, and where there are intervals of consciousness between the first and final setting in of coma — is the worst and most fatal form of the disease and without any reasonable

hope of permanent recovery. The peculiar sputtering, puffing sound of which I have several times spoken is unfavourable. Cold sweats and involuntary evacuations of the bowels or bladder are also unfavourable symptoms. Sometimes the prognosis depends upon the origin of the disease, and the habits of the patient. When apoplexy is the result of direct exposure to the rays of the sun the prognosis is more favourable than under most other circumstances. I have already said that imperceptibility of the pulse is a bad sign.

Causes — The classifications of the causes of apoplexy, like its definitions

are various. There are according to my views many objections to each. They have been divided into external and internal; into proximal and remote; into predisposing and exciting; into primary and secondary. I think the manner in which the causes are disposed of by Eberle, Watson and some others, to be as good as any — I will therefore adopt it, and divide them into predisposing and exciting causes. This, I say, I believe to be as good as any I have seen. I do not however consider it free from objections. In fact I fear that a perfect division of the causes of apoplexy will never be

accomplished. There are some which must necessarily hold a middle rank, and which are ever ready to act on either side, as predisposing or exciting causes

Predisposing Causes — Prominent among the predisposing causes is hereditary tendency. I believe this tendency to be less powerful, or less frequently bequeathed than, is the case with pulmonary phthisis: Yet, other things being equal, I believe that those whose ancestors have suffered or died with the disease are most likely to be affected by it — Peculiar conformation is another predisposing cause.

Persons who are subject to it from this cause frequently have large heads, thick, short necks, broad shoulders and chests, red eyes and faces, and what is called a square make, with a tendency to plethora. These persons often have great muscular power, but seldom possess much endurance. High living, sedentary habits and the continual use of wine, opium or other stimulants, in fact any thing that has a continued tendency to increase the circulation in the brain may act as a predisposing cause of apoplexy; such are heat, either of the atmosphere, or directly applied to the head,

different emotions of the mind; continued venereal intercourse; &c. Some of these by acting temporarily are exciting as well as predisposing causes. Tumours about the neck, preventing the return of venous blood from the brain; diseases of the heart and lungs; the repulsion of old discharges; the drying up of old ulcers, may act as predisposing causes. Although plethora is a predisposing cause of apoplexy, it cannot be denied that anaemia and cachexia are both sometimes equally so. Marshal Hall says; [Prac obs and suggestions] "Sometimes there is a state of great fullness: sometimes an opposite condition

condition of anaemia. In others there is neither plethora nor anaemia, but that morbid condition of the system, termed cachexia, as the predisposing cause of apoplexy". It is important in the treatment to tell whether the threatened attack of apoplexy is caused by anaemia or plethora. But how are we to do so? Dr Hall thinks vertigo when it can be ascertained to exist is a very important guide. He says in the vertigo of plethora the patient will bear, and requires, lavish detraction of blood; while in the vertigo of anaemia, he neither requires, nor will bear, without syncope, the loss of much blood.

The history of the case and the appearance of the patient will also assist us in forming our diagnosis, and consequently our treatment — Diabetes, Bright's kidney disease and the lithic acid diathesis, are sometimes predisposing causes of apoplexy. One of the most important of predisposing causes is old age — According to the observations of both modern and ancient pathologists it occurs about the age of sixty most frequently; Exciting causes — In many cases of apoplexy we are unable to trace any exciting cause to which the attack may be attributed. But in others we can distinctly mark

their influence – Generally whatever produces increased action in the brain acts as a predisposing cause of apoplexy; so whatever increases the general circulation acts as an exciting cause – There are however exciting causes which do not depend upon or create an increased circulation. Among the exciting causes are bodily exertion, suspended respiration; straining at stool, (preventing the passage of blood through the lungs); ligatures around the neck which prevent the blood from returning from the brain, venereal excitement, sudden mental emotion, posture particularly twisting the

the neck, over-loaded Stomach, and in warm climates exposure to the direct rays of the Sun—

Pathology and anatomical Characters.

— What is the immediate or essential cause of the apoplectic phenomena? This question has been answered by many pathologists, and in many ways. Some contend that pressure is the only essential cause, Others among whom is Mr Serres deny that pressure is ever the cause of apoplexy— Some, among whom are Clutterbuck [See encyclopedia prac Med] and Abercrombie think that the abolition or extinction of Sensorial power and voluntary

motion, depends upon the cessation of the circulation in the brain. That pressure is an efficient cause of apoplexy has been proved by numerous pathologists. It has been found that coma and apoplectic symptoms may be produced at will by pressure on the brain, after a portion of the bone has been removed by trepanning, or through the fontanelles of babies. It is said that the inhabitants of some parts of the world, that they may enjoy the pleasures of married life (if such it be) without being burdened with its fruits, addopt this method of destroying their

Supernumerary offsprings - But why does pressure not always produce apoplexy, or coma. Foreign substances, even bullets have been known to be entangled in the cerebral mass, and to press upon it, and yet produce no apoplexy. Now in case foreighen matter have found its way into the brain and produced no coma, the brain will in every instance be found to have made room for its accommodation, by the absorption of an equal portion of its own substance. In case blood is extravasated in the brain or between its membranes - one of three things according to my pathological

ideas must happen. The blood must be reabsorbed, a corresponding portion of the brain must be absorbed or coma must follow. If as there is little doubt the brain depends for the performance of its functions upon the continuation of its circulation, we have in pressure an ample cause of the apoplectic state; for if, in consequence of the peculiar conformation of the skull, and the incompressibility of the brain, pressure be applied at any point it will be effective at any other, no matter how remote. "Thus we find pressure to be an efficient cause; "that it is an essential one is I believe now

generally admitted. Marshal Hall says; "The pathological conditions of the Cereral portion of the nervous System have always been considered the most difficult to be comprehended of any to which the human frame is amenable. There is a want of correspondence between symptoms and lesions: A want of uniformity in the manifestations of diseased actions, which renders the subject one of surprising intricacy." Upon dissection the brain is found to present one of the following appearances.
"There is an extravasation of blood, or there is an effusion of serum.

or there is only turgescence of the vascular system of the brain; or no morbid condition at all is detected. This extravasation of blood is thought by some to be caused by the rupture of blood vessels. This from the peculiar texture of the arteries of the brain, seems probable, but is not in accordance with the views of some modern pathologists. Effusion of blood may take place in the brain or cerebellum; in the crura in the pons varolii; in the medulla oblongata, in the ventricles on the surface of the brain: between the membranes and the dura mater and between the dura mater and

and the cranium [Neill and Smith]
The effusion of blood in one hemisphere produces palsy of the opposite side. This I believe to be invariable
The color of the effused blood depends upon the time at which it is seen, or rather the time that has elapsed between the patients death, and the extravasation of the blood. When the attack has been sudden and of short duration the color of the blood is dark, and its consistency almost fluid. If the attack has not been so suddenly fatal the color of the blood is light-red, or yellow. The material comprising the cyst is to a certain depth softer than the

neighboring portions of the brain. This redness gradually becomes less as it proceeds downwards from the effused blood until it becomes intermindistinguishable. The amount of blood effused may vary from a single drop to several ounces.— Extravasation of blood is not always the immediate, or even the remote, cause of death. The blood may be gradually absorbed. The walls of the cavity or cavities may gradually approximate each other, and finally unite by cicatrix; Or they may be drawn together and not unite; Or they may remain in an expanded or unclosed state

In the latter case the cavity usually contains a gelatinous fluid or some other substance, sometimes it entirely or apparently empty. I have said the blood may be absorbed. So it may. But this does not always happen. In some cases of recovery from apoplexy the clot is never absorbed; but increases in consistency and finally becomes organized and supplied with blood vessels. In this case, as I have before intimated, the brain must lose a corresponding portion of its substance. The most frequent situation of the clot is in the corpus striatum, optic thalamus and hemispheres. When serum is

effused in sufficient quantity to produce coma and apoplexy the seat of the effusion is usually in the ventricles of the brain.

Liability — Persons of all ages are liable to be attacked by apoplexy; but those of advanced years are most so — Women are said to be more liable to serous apoplexy than men —

Hemiplegia — Hemiplegia is that form of paralysis which attacks but one side of the body and never affects less than the upper and lower extremities. (Todd)

The face is generally affected as well as the extremities. —

The face when affected is affected on the same side with the palsied limbs. The mouth is drawn toward the sound side in consequence of the want of opposition on the other side. The tongue when protruded forms a curve the point inclining toward the affected side. Sometimes the muscles of the tongue are flabby and the patient is nearly or entirely unable to articulate. Sometimes the mind is unimpaired; but generally it is irrecoverably lost, or irrepairably damaged. The ability to swallow is sometimes lost, rendering dangerous the administration of medicine. There may

There may be perfect or imperfect anaesthesia. The late Dr Chew recommends the following method of obtaining the information in regard to the amount of anaesthesia. "Touch", he says, "the patient with your fingers separated some distance from each other; then ask the patient at how many points you are touching him; if he reply, at two, move your fingers toward each other and repeat the question; if the reply be the same, move them toward each other until the patient can feel but one point of contact. The nearer you can make your fingers to approach each other while the patient can distinguish the points of

contact: the less is the anaesthesia. The limb may be wasted by anaemia or swollen by oedema. It is generally more susceptible to the influence of blisters and heat than the sound member, and these remedies require great caution in their administration and application.

Treatment — The treatment of apoplexy when the apoplectic state is once settled and confirmed, is like that of phthisis, too often of little avail. Yet we must not be discouraged at the result of our endeavors to relieve our patients of a disease the prognosis of which is

so universally unfavourable. That we are sometimes successful is sufficient cause to induce us to use every remedy that reason or experience may suggest. That kind of treatment which some call prophylactic is of vast importance. We may not always be able to cure our patient of confirmed apoplexy, but we can often by adopting a defensive management, avert the attack, and thus save our patient, by anticipating the disease. If the patient be habitually intemperate, he should at once leave off his spiritual inclinations. If he be already temperate in his habits he should

restricts himself to simple and abstemious diet. When the premonitory symptoms are urgent and point to the head, with a full pulse, blood must be drawn. Generally the premonitory symptoms will sufficiently indicate the prophylactic treatment. The treatment of apoplexy proper, to many persons, means little else than blood-letting. Apoplexy itself is looked upon by those persons, as being, invariably, a state of fullness. Dr Eberle, [Page 28] says: Formerly bloodletting was looked upon with doubtful propriety in this disease: but at the present day its usefulness or rather indispensableness

in every case of genuine apoplexy is universally acknowledged. Some persons neglect blood-letting altogether and pursue the stimulant plan - now these extreme methods of treating apoplexy cannot be too highly deprecated. Fortunately the expressed views of Marshal Hall have had, and are having, a favourable effect: consequently blood-letting is much less frequently performed in this disease than it was a few years ago. I do not wish to convey the idea that I consider blood-letting useless: far from it: blood-letting it cannot be denied is in very many cases our sheet anchor. I am only reporting

at the conservative and compromising inclination of the extremists, I am only expressing my satisfaction that eight pints of blood are no longer drawn from the arm of an anaemic and apoplectic patient, the real treatment of whose case should be a mild course of chalybeates, carefully and prudently administered. Nor am I less opposed to the administration of stimulants where the symptoms clearly indicate abstraction of blood. If the patient be plethoric and comatose, with a full hard pulse blood-letting is indicated. If we suspect extravasation of blood we must still resort to the lancet; for although

we cannot remove the clot, nor can we in consequence of the peculiar formation of the head, and the absence of atmospheric pressure, lessen the amount of blood in the brain by venesection, we can lessen its velocity and thus lessen or arrest the haemorrhage, which may still be going on. But light bleeding will be sufficient generally for this, and it is of importance to give the patient the benefit of all the strength possible; as he will require its assistance to bear up under the process of absorption. If the patients be anaemic and inclined to syncope, blood-letting must be withheld, and even stimulants administered. The bowels

are usually torpid, and brisk cathartics are of decided advantage. Application of cold to the head is sometimes useful. Cupping, blistering and leeching are of the reverse to. If the patients bowels will respond to moderate purgatives, calomel and rhubarb may be given; if not, croton oil will be found eminently serviceable. Purgative enemata should not be neglected. In the treatment of the palsied limb after the danger is past, much must be left to nature. Mild aperients with mercury sometimes seem to do good. In cases of long standing electricity and strychnia may be of service. In convalescence from apoplexy the diet should be strictly abstemious.

Thesis on
Erysipelas
By N. R. Gerry

Jany. 1844.

Gentlemen and Professors, of the Maryland University, Md.
It being the privilege of each Student to furnish a "Thesis" on some disease, or subject relating to Medicine or practice, I avail myself of the opportunity of giving my views, more particularly in accordance with the writing of others, than by my own experience. Having chosen a disease which is of great importance to the Surgeon, as well as to the practitioner to become sucessful in either branch of our profession, I must confess that I have a task before me, which I feel incompetant to perform; but being almost confident that your kindness will make due allowance for my present inexperience, I am emboldened to give you what little I have had and know on the subject. For I hope to become more

acquainted herewith, both theoretically and practically; & all wants to do the best I can in honour of the profession I have espoused; and in future Should I fail to do good, may God grant that I may have sense, good judgement and the knowledge of my profession sufficient to do no harm.

In my dissertation I shall be very brief in describing the Causes, Symptoms, and treatment of the disease on which I intend to write, thereby hoping not to trouble you with any thing unnecessary, or even trying to acquaint you with any new idea, or even to add one grain more of knowledge to you on the subject, which is so well known to your Experience and professional Skill.

I proceed therefore to Erysipelas. And I wish in the first place, to fix and define that specific complaint of which alone I propose at present to write. According to Dr Watson of England, Erysipelas appears to be a specific disease prevailing epidemically, and capable of being communicated under circumstances favourable to its propagation, from one person to another.

Erysipelas in the sense now explained called in Scotland the Rose and in England St. Anthony's fire, resembles others disorders of the same group in these points also; that the fever precedes the local inflammation, that certain premonitory symptoms frequently go before the out break of the disease, and that sore throat is an early, and almost a constant accompaniment of the complaint.

Symptoms.

The Cutaneous or Simple Erysipelas is known by redness of the skin, which disappears momentarily on pressure; Considerably puffy swelling from serous effusion into the cellular tissue; and severe stinging burning, or smarting pain, the redness is generally of a vivid scarlet hue, but it will be faint and yellowish if the disease is attended with much debility, or if it affect the eye lids, scrotum or other loose cellular parts where it always produces a good deal of serous effusion.

In the Cellulo Cutaneous or Phlegmonous Erysipelas the redness is darker and sometimes dusky or purple and it is scarcely if at all, dispelled by pressure;

The swelling is much greater and is hard, drawing and tense, and the pain is not only burning, but throbbing.
"A remarkable symptom, and one very often observed in a painful swelling of the lymphatic glands that receive the lymphatic vessels of the part about to be attacked with erysipelas, although there is as yet no appreciable change in the colour, thickness, temperature and sensibility of the skin.
This swelling which is to be found in at least two thirds of the cases, precedes the development of the erysipelas from twenty four hours to one week. It is a phenomenon to be noted as its occurrence will place the surgeon on his guard."

Constitutional Symptoms.

Both varieties are ushered in with shivering, headache, pain in the back, nausea, and bilious vomiting; and both are attended with fever, which may vary in its type according to circumstances. It may be of a sthenic character when it attacks the robust, but it often assumes a low typhoid character if the patient is old and weak; and a large portion of the cellular tissue has begun to slough. After the redness has lasted three or four days, it fades, the swollen surface subsides, and desquamation ensues; and as the inflammation creeps, perhaps, gradually from one part of the surface to another, you may find the face becoming pale, and

covered with patches of dead cuticle while the scalp, or the upper part of the neck, is beginning well. Sometimes these parts of the inflamed surface on which blisters had formed are covered with crusts, rather than with merely dead and dry cuticle.

In almost all these cases of erysipelas of the head and face, there will be found to be redness and soreness of the throat also, although this is not always inquired into, or complained of.

It is said that the erysipelas does not and then suddenly desert the surface; and that inflammation of some internal part, and particularly of the brain is apt to follow such rapid subsidence of the external malady.

I presume that this metastasis is more. I do not recollect to have seen it. But the extension of the disease, the supervention

of delirium and coma, while the external inflammation continues, is of common occurrence.
There then is one way in which erysipelas is accustomed to prove fatal; by effusion within the head, and coma. Death may also occur by the affection of the throat, and asthenia.

Causes of Erysipelas.

The causes of erysipelas are various, and often obscure. It is supposed to be communicable, by contagion from one to another, yet this is denied by many. It is more active at certain times seasons and places, than at others; hence it is believed there there is a peculiar specific agency which augments the disease. But allowing that contagion

is one of the exciting causes of Erysipelas, there are others which more frequently excite it. At least there are many instances of the disorder in which we can trace exposure to contagion, and in which we can perceive some other probable reason for its occurrence.

Sometimes, no doubt it comes on without any obvious cause.

The application of cold of the gives rise to it.

Irregularity of diet is said to do the same,

Violent mental emotions are also accused of being occasional its cause: it is said to have been brought on both by anger which is an exciting cause, and by fear, which is a depressing passion.

A morbid condition of the blood may frequently have much to do with the cause of Erysipelas; especially when the disorder appears to be produced by cold &c., Some cases may result from local injury, which in my opinion never becomes contagious or spreading. Erysipelas appears to be a disease, as I have stated specific in its character, and running a certain course and a disease which cannot be cut short by any particular mode of treatment. It will generally terminate however later by resolution whether remedies are employed or not. I do not wish to be misunderstood, as meaning that remedies in this disease are of no avail, but of close follow.

from this that remedies may be used not as curative agents, but as mere conductors of the disease to a safe termination. Our object must be on the one hand, to repress (if we can) any tendency to the spreading, by inflammation, of vital organs; on the other to sustain (if we can) the general strength until the disturbance has passed off. If you look at the history of erysipelas, and of the notions which have prevailed respecting it, you will find that the opinions in favour of giving support and of abstaining, as much as—

possible, from the vitiation of blood greatly diminished.

Prognosis, — "The most unfavorable if the patient is old and enfeebled, and habitually intemperate" if the fever is of a low cast; if the malady is situated on the head or thorax, and there is coma or great dyspnoea; — or if the dyspnoeas is of the pneumonic variety, and a large portion of the cellular tissue and skin is on the point of sloughing. The return of suppuration in buboes and the formation of abscesses are most favorable signs.

Treatment.

The indications for the Constitutional treatment are to purify the blood and support the strength to resist the extension of the disease, to allay irritation and to give free vent to thoughts and discharges.

It is always necessary to begin the treatment with emetics and purgatives, or as Fox Hole says the Eliminative Measures; that is to produce a free and copious discharge of all the excretions, by which the blood naturally becomes purified.

On the occurrence of the symptoms, an emetic should be given (Tart. Emetic gr iij Aqua pura ℥iij a tablespoonful every fifteen minutes until it produces nausea.) This may be followed by three grains Hydr. Sub. Dur. and by purgative draughts every six or eight hours, as long as they bring away hardened masses, or large offensive liquid motions.

(2) Antiphlogistic Measures.

Bleeding is said to be required if the patient, a young and vigorous,

The pulse full and strong, the face flushed and delirium violent; and if the inflamed part is full, tense, and strongly red, and especially if blister on the head or throat, but in most cases a small dose of Mercury or (P. Hyd Sul. Mur gr v. Extract Hyoscyamus gr ii.) nightly followed by a gentle aperient, and Carbonate or Citrate of Ammonia in the Infusion, after a good preliminary bringing by Calomel.

According to Smith,
"The practice of bleeding
in zymotic diseases belongs
to a past generation."
This course I am inclined
to believe, that is, bleeding
can be very well dispensed
with, and especially
in old persons — who frequently
become weakened, and
the disease assumes a
typhoid condition or
tendency.

Third, — During the whole
course of the disease, the
patient should have a good
quantity of nourishment;
beef tea, sweet water and milk;

Lemon water with Lemon juice, and port wine or brandy administered in proportion to the quickness of pulse.

Tonics,

Port should be given in all cases as soon as the tongue becomes clean and the skin moist; but it should be resorted to without delay if the pulse is soft, tremulous, or very rapid, the heat moderate, and the delirium low and muttering, or if suppuration or sloughing has commenced. Opium may be given in the later stages of the disease to allay restlessness provided it does not aggravate congestion, nor cause. If the tongue is green,

irritation of the Stomach,
with diarrhoea, Smart pains
of Stomach. Cum Cretae or Pul.
Ipecac Comp. should be given
with effervescing draughts (see
formula in Scale powders.)
The Sinch. Chlor. Tinct. is spoken
of as being a very excellent
remedy, given internally
in doses from ten to thirty
drops, in Erysipelas inflammation
It is highly spoken by Prof.
A. R. Smith, and cures by Dr
Merritt. I have prescribed
the Muriated tincture of iron,
in a case of Purpura, Cutaneous
Erysipelas; to an old lady
seventy four years of age,
who experienced great benefit from its use,

Ciue to my astonishment, in less than three days the inflammation subsided, and the pulse become stronger; the appetite better, the skin desquamated, and changed its yellowish appearance; and my patient got well, and is still living and enjoying good health and spirits.

I also used ~~used~~ other remedies locally and internally to counteract the disease and vomit her, as I deemed suitable, such as Tr. Iodine. Muriate of Silver locally and Bark. Sulph. Cinchona Serpentaria Virg. &c., internally.

Whether the cure of this case was owing to the Muriated Silver, or to the other

local and constitutional
measures, I may not positively
say; but I must say in all
events, the improved, gradually
from the time she commenced
its use. I have been informed
that the Mur. Sr. Ferri. can be used
internally and externally with a
much more decided effect,
in erysipelas, than when it is
merely used internally; how
true this may be, I am not able
to say, as I have had no
opportunity to try it, nor have
I read any medical work as
yet recommending it to be
used internally and
externally at the same
time in scarlet or other forms of erysipelas.

Leech Houses

Leeches are useful when the pus is good, and the redness spread, and the part shutting distently. Minute punctures about one fifth of an inch deep, made with the point of a lancet, may be used as substitutes; and often permit the discharge of considerable quantities of blood & serum. Cold lotions may also be used.

But warm or tepid poppy fomentations will generally be found more soothing, and therefore safer than

Cold applications.
When closed on the inflamed part, or soft curded wool, is often very soothing in simple erysipelas. Pressure by bandages in the later stages, is also not without benefit, especially when the erysipelas inflammation is atonic, oedematous, - Stimulants. Painting the surface with solution of Nitrate of Silver or blisters are of great use in creating a healthy exudation, and so forming a stop to tedious erratic cases of simple erysipelas, after proper constitutional remedies have been used,

In simple cases, the extension of the disease may sometimes be arrested by applying the nitrate of silver so as to excide, completely, the inflamed part. When there is a tendency to suppuration, the elimination or disappearance of the internal inflammation, warm baths moistened with spirit of turpentine or spirit of camphor may be applied externally, while diffusible stimulants are administered internally. Incisions may be of advantage when erysipelas affects the throat, and by its pressure is made on the trachea.

The incisions should be made
three or four inches in length,
In case there is much hemorrhage
it may be best stopped by continued
pressure - by the fingers, &c.
In closing my remarks on Erysipelas
I dont think, I can use better authority
than that of (Dr. Watson on the
treatment and cure of Erysipelas generally.
The first requisite for securing
that speedy, yet recoverable
(disease) cases, is that they should
be perpetually watched and
tended.
The indications of treatment
may alter from one hour to another,
and it is only by great vigilance
on the part of the medical
attendant, and on the part -

of an intelligent and obedient nurse that, therefore obtains its full chance of bringing the patient through. After cleaning out the alimentary canal, then, I would not be active in either way, unless I saw some plain indications for activity.

If the pulse become weaker, more, and I did not feel sure about the propriety of stimulating, I would give one or two grains of the Carbonate of Ammonia every four hours, and baffle. If the disease went on smoothly under that treatment, well and good. If the pulse is still

continue to sink, I should have recourse to wine or to bottle wine and bark; but if the two I am friendly to wine to wine, and the patients like it better, you may be more sure of their taking it.

On the other hand, there were much headache, and the pulse wiry, and the fabric distrop green, I should apply a few leeches, and prescribe the tartarized antimony in a saline draught. The bowels should not be allowed to become confined; but the mild aperients are better than the drastic in these cases."

Dr Watson speaks highly of the Muriated Tincture of Iron, and intimates that he should have no scruple in trying it when there was no great cerebral disturbance, he also quotes from the experience of Dr Balfour — who having treated twenty cases says; with ten to twenty minims of the Tincture every 2 hours as to thoroughly satisfied of its efficacy as he record (in the Monthly Journal for 1853) his belief that we have now "a certain and unfailing remedy, whether the eruptions be infantile or adult, idiopathic or traumatic."

Flour, lard with acetate of Lead, have these virtues spoken of in erysipelas, also Mercurial Ointment blisters and Cold lotions; but whichever gives the most relief, and comfort in subduing the pain, irritability and rest should be used, this will be the duty of the practitioner to decide and recommend, which not, unfrequently in bad cases of Erysipelas will baffle his Medical Skill.

I may here mention, that the Tr. of Iodine may be used locally with much advantage in simple cases of Erysipelas, although I think the Nit. Silver will be more decided in its effects.

So much for Dyspepsia, as it usually comes under the Management of the Physician. The other forms of Dyspepsia, Hypochondriasis, &c, I will not trouble you with; as you have doubtless forgotten more than I know on the subject.

With the highest sentiments of respect, I am your most obedient servant, Most Respectfully.

W. R. Gorrey.

An Inaugural Dissertation
on

Sanguinaria

Submitted to the examination
of the
Provost Regent and Faculty of Physic
of the
University of Maryland
for the Degree of
Doctor of Medicine
by

Benjamin L. Bird, jr.
of
Maryland.

Session, 1863 & 4.

Sanguinaria.

Introductory.

Man being the subject of disease, nature presents herself in manifold forms for his relief. The rapid progress of medical science has demonstrated the wise intention of the Creator in developing in almost every plant some medicinal virtue. - Some of the most valuable articles of the Materia Medica to day were yesterday considered worthless and insignificant. The Sanguinaria might be mentioned as a familiar illustration. This plant so common and well known to all, and so little used as a remedial agent heretofore, has been found to possess medicinal virtues of rare quality and but little known to the profession at large.

Botanical Notes.

The blood-root or as it is sometimes called puccoon, red-root, blood-root, red-lucine, &c, Indian paint root, (the latter name derived from the use made of it by the Indians as a paint not only for their own persons, but on their baskets and various other articles) is an herbaceous, perennial plant. Its root is horizontal, abrupt and contorted, about as thick as the finger, two or three inches long, fleshy, of a reddish-brown color on the outside and brighter red within. It is furnished with numerous slender radicals, and makes offsetts from the sides, which succeed the old plant. From the end of the root the scape and leaf-stalks arise surrounded by the large sheaths of the bud. These spring up together, the

folded leaf envelopes the flower-bud and rolling back as the latter expands. The leaf which stands upon a long channeled petiole is heart-shaped, deeply lobed, smooth, yellowish green on the upper surface, paler or sea-green on the under, and strongly marked by orange colored veins. The scape is erect, round and smooth, rising from a few inches to a foot and terminating in a single flower. The calyx is two-leaved, falling in autumn. The petals usually about eight in number are spreading, ovate, obtuse, concave, mostly white, but often slightly tinged with purple or rose. The stamens are numerous, with yellow filaments shorter than the corolla, and orange oblong anthers. The germ is oblong and compressed with a sessile, persistant stigma. The capsule is oblong,

acute at both ends, two-valved and contains numerous oval, reddish-brown seeds. The whole plant is pervaded by an orange-colored sap, which flows from every part when broken, but is of the deepest color in the root. The blood-root is one of the earliest and most beautiful spring flowers of North America. It grows abundantly throughout the whole United States delighting in loose, rich soils and shady situations, and flowering in March and April. After the fall of the flower the leaves continue to grow, and by the midde of summer have become so large as to give the plant an entirely different aspect.

Sensible and Chemical Properties.

Except the seeds all parts of the plant are active; but the root only is officinal. It shrinks

in drying and as kept in the shops, is in pieces from one to three inches long, from a quarter to half an inch or more in thickness, flattened, much wrinkled and twisted, and often furnished with abrupt offsets and radical fibres attached, of a reddish-brown color externally, with a spongy uneven fracture, the surface of which is at first bright-orange but becomes of a dull brown by long exposure. The color of the powder is a brownish-orange red. Sanguinaria has a faint, narcotic odor, and a bitterish, very acrid taste, the pungency of which remains long in the mouth and fauces. It yields its virtues in part to water and alcohol, entirely to the dilute acids and diluted alcohol. It is incompatible with alkalies, alkaline earths, tannic acid,

corrosive sublimate and tartar emetic; all of which produce precipitates with the infusion except the last, it however produces a precipitate when added to any salt of Sanguinarina in solution.

Active Principle.

The virtues of the root depend on a peculiar organic alkali, denominated Sanguinarina which was discovered by the late Doctor Dana of New York. It may be obtained directly in the following manner, provided animal charcoal be chemically pure, (entirely free from acid.) Exhaust the root with dilute acetic acid, precipitate with water of ammonia, wash the precipitate, boil it with animal charcoal and distilled water, filter off the water, treat the residue left upon the filter with boiling

alcohol, and finally evaporate the alcoholic solution. It may be further purified by treating it again with pure animal charcoal. If the charcoal contains the slightest trace of acid a salt of sanguinarina is formed which imparts a red color to the whole mass, and being insoluble in alcohol would be left in the charcoal. It is said to be of a pearly white color. I have not been able to obtain it lighter than powdered ipecacuanha (and all that I have seen made by others was of the same color) owing to the impossibility of obtaining the animal charcoal entirely free from acid without preparing it myself for the purpose, (which requires a long time.) I have endeavored to make it directly without the aid of charcoal and indirectly

from the sulphate. By the former mode it is made thus - Make an infusion of sanguinaria, precipitate with water of ammonia, wash and dry the precipitate, dissolve in alcohol and evaporate the alcoholic solution until it begins to deposit the sanguinarina then throw it on a quantity of water contained in a capsule, and let it stand for 24 hours, collect the precipitate, dissolve in diluted acetic or sulphuric acid, filter, precipitate with ammonia and wash the precipitate which will be pure sanguinarina. Although the pure alkaloid is obtained by the above process it will be perceived that while economical as to the menstrua employed, there is a great waste of the drug itself, as water extracts only a limited quantity of its

active principle. If the dilute acids be employed in the first instance instead of water, the sanguinarina will contain a small quantity of resin. When made from the sulphate it is only requisite to decompose the latter with ammonia and wash the precipitate. Sanguinarina is uncrystallizable, and exists in the form of an amorphous powder. It is soluble in ether, very soluble in alcohol and insoluble in water. With the acids it forms salts soluble in water, all of which form beautiful red solutions. They are acrid and pungent to the taste. It seems to be conclusive from these facts that the red color and acid properties of the bloodroot may be owing to the presence of some native salt of sanguinarina which is decomposed

by ammonia in the seperation of the organic alkali. The sulphate as I prepared it may be made in the following manner. Introduce the powdered root into a conical glass percolator and gradually pour diluted acetic acid upon it until the liquid passes colorless, (water acidulated with sulphuric acid will answer as well) precipitate with ammonia, wash the precipitate, dissolve in diluted sulphuric acid, treat repeatedly with animal charcoal, then evaporate until it begins to deposit and set aside to evaporate spontaneously. Sulphate of lime will crystalize, (derived from the charcoal) mixed mechanically with the sulphate of sanguinarina; to get rid of which, together with what resin etc. there may be remaining, throw all on a filter and wash with alcohol until

the washings pass colorless, (which will leave on the filter sulphate of lime and sulphate of sanguinarina) then with distilled water wash out the sulphate of sanguinarina leaving on the filter sulphate of lime. Evaporate the watery solution of sulphate of sanguinarina over a water bath to dryness. The sulphate may be obtained more readily by exhausting the root with water strongly acidulated with sulphuric acid, precipitating with ammonia, washing and drying the precipitate, dissolving in ether and precipitating with sulphuric acid dissolved in ether. A pure sulphate is thus obtained, but as the sanguinarina is not very soluble in ether a large quantity is required to dissolve it, rendering the process too expensive and imperfect.

The sulphate is very soluble in water, it is insoluble in alcohol and ether. It is incompatible with the same substances as the infusion of the root, producing precipitates with them more promptly, especially with tartar emetic which gives no precipitate with the infusion. I have not as yet succeeded in crystalizing the sulphate. What I have made is in the form of a granular powder. That it is not amorphous may be proved by placing a bit of the moistened powder under the microscope. Mr. Bullock of Philadelphia informed me that he had seen it in needle shaped crystals. He is the only person I know of who has seen it in the crystaline form. It may crystalize if allowed to evaporate slowly under a bell glass over sulphuric acid.

Dr. J. Donaldson of this city furnished me with a specimen of the acetate beautifully crystalized. The acetate is far less acrid and pungent to the taste than the sulphate.

Effects on the System:

Sanguinaria is emetic, nauseant, sedative and expectorant, without narcotic properties. In an internally in small and repeated doses it acts as a sedative, decreasing the frequency of the pulse, while it promotes the secretions, especially that of the lungs. Its sedative effect is usually apparent after the first twenty four hours. More largely taken it produces nausea. In full doses it produces vomiting. When given in nauseating and emetic doses it has not the same decided ~~and~~ sedative effect as when given in small doses often repeated. When

thus administered it appears also to act as a tonic, increasing the appetite and facilitating digestion; effects which are probably owing to a very gentle exercise of its irritant property. It probably also promotes the gastric secretions.

The bowels are not affected by it in the slightest degree. It is a local irritant of considerable power, exciting violent irritation and sneezing when snuffed up the nostrils, and operating like an escharotic upon fungous surfaces. The bloodroot itself is said to be alterative - excites the liver into action with increased secretion of bile, and also sometimes excites the menstrual secretions. In over doses it acts as a poison, causing burning in the stomach, excessive thirst;

violent vomiting, faintness, vertigo, dimness of vision and great prostration.

I presume the salts of sanguinarina given in overdose would produce the same results as the root itself. The proper antidotes are the alkalies,- vegetable infusions containing tannic acid, and demulcent drinks. I found lime water and milk very useful and efficient in relieving the nausea and vomiting caused by the sulphate.

Therapeutic Application.

Sanguinarina may be employed for the ordinary purposes of the emetics, and is especially applicable to cases of croup,- being more prompt in its action and less violent than most emetics. In consequence of its general efficiency, comparative mildness and entire

safely, it is admirably adapted for all those cases in which an emetic is called for with the object of simply evacuating the stomach, as in cases in which an over dose of opium or other poison has been swallowed. Given in moderate doses when there is an indication for the frequent repetition of the emetic and especially when the affection to be treated involves the respiratory passages it is especially applicable. It produces a local irritant influence on the stomach, and may be preferably employed when emetics are used for this purpose, as occasionally in dyspepsia.

Having determined to make this medicine the subject of my thesis, I began my experiments during the latter part of my residence at the Episcopal Hospital in Philadelphia

I will first cite a few cases in which I tried it for its emetic effect alone. The first case on whom I tried it for this effect and before I knew the dose required, was a lad eighteen years of age. On the 23d. of last June he took a quarter of a grain of the sulphate every three hours; after taking the first dose he experienced nausea which continued until the third dose had been taken, free vomiting then ensued, followed by slight nausea from which he recovered in a few hours.
On the 28th., Wm. Usher, aged, nine years took a quarter of a grain at bed time, which caused nausea only; the next day I gave him half a grain two hours after dinner which caused free emesis in a few minutes. He recovered entirely from its effects in less than two hours.

John Foran, aged, 35, took half a grain at bed time which caused sick stomach - he sat up next morning, but had to return to his bed on account of extreme nausea. He did not vomit but recovered in a few hours. The medicine given in so large a dose would have proved emetic in this latter case had he not taken it just before retiring to his bed and without knowing the object of the pills.
A girl, aged, 13, while taking the sulphate in doses of one sixth of a grain, lost her breakfast by taking a pill just before eating.
On the 4th of last August a Mr. Boyd, aged 30, was admitted into the Episcopal Hospital suffering with dyspepsia; - he requested one of the resident physicians to give him an emetic stating that he was very hard

to vomit. Glad of the opportunity for trying my new remedy I sent him two pills each containing half a grain of sanguinarina, one was administered followed in a few minutes by the other which had the desired effect. Having considered the emetic properties of sanguinarina and given a few cases as results of my experiments, in proof of its power and importance as such, I will next consider its sedative action, and in doing so I have only to give the results of a few cases in which I have tried it.

Charles Smith, aged, 16, laboring with valvular disease of the heart, was the first in which I had the opportunity of administering it for its sedative effect, - he commenced with one twentieth of a grain every

three hours, which was gradually increased to one eighth. His pulse before he took the sanguinarina ranged from 100 to 120, morning and evening at which time I examined it. Owing to the excitement during the day it was more frequent in the evening than in the morning. After taking the sanguinarina for 48 hours during which time there was very little change, his pulse became more regular and less frequent - it was reduced from 120 P. M. to 96 P. M., and from 100 A. M. to 96 A. M. I then continued the medicine in doses of one eighth of a grain, noting the pulse both night and morning for 10 days. The pulse fell from 96 on the 2nd P. M. to 88 on the 4th P. M. In the morning there was very little change. I continued it for

six days longer, during which time the pulse remained from 88 to 84 P. M. and 96 A. M. One would suppose that owing to the increased excitement of the day over the night when all is quiet, the pulse would be less frequent in the morning than in the evening. I account for it in this way - the medicine was not taken during the night. The fact that the pulse was reduced from 120 P. M. to 84 and from 100 A. M. to 96 - 36 beats less in the evening than in the morning, notwithstanding the patient walked about during part of the day, subject to more or less excitement, while at night both body and mind were at rest, is an evidence of the decided sedative action of the medicine.

Frank Moore, sailor, aged, 35, commenced with one sixth of a grain every three hours, which was increased to one fourth, the latter dose caused extreme nausea - his pulse rose from 72 to 76. I then gave him one sixth of a grain every three hours and continued it for five days. When he began to take the medicine his pulse stood at 76. After taking it for three days his pulse was reduced to 70, the next day it was 64, and on the fifth it was 60. The medicine was not taken during the night and his pulse was more frequent in the morning as in the case of Charles Smith.

The next case I am about to describe, was that of Alexander McCauley, who took one sixth of a grain which was increased to a quarter every three hours, - the latter dose caused slight nausea

but soon became tolerant. The pulse was not materially affected during the continuance of the medicine in so large a dose. This latter case goes to prove what I said before - that when taken largely its sedative effect is not so decided as when taken in smaller doses.

Without enumerating more cases in proof of the sedative action of sanguinarina it will be sufficient to state that the result of my experiments is fully substantiated by those of one of the first physicians in Philadelphia, Dr. R. P. Thomas - Professor of Materia Medica in the Philadelphia College of Pharmacy, also one of the visiting surgeons to the Episcopal Hospital. This gentleman thinks its sedative action as decided as that of digitalis. As a nauseating agent and expectorant the sanguinarina is not without value. That it

is nauseant we have abundant evidence from what has been said. I have had the opportunity of administering it in one case of asthma. A Mrs. Healy, aged, 30, was admitted Sept. 29th into the hospital suffering with it, the paroxysms returning frequently, especially at night; the sanguinarina was given for several days after her admittance as a nauseant, which had the effect of prolonging and abating the paroxysms.

I have yet to speak of the escharotic properties of sanguinarina, and as I wish nothing that I say to be taken for granted, I will mention the cases in which I used it as such.

I selected from the surgical ward three patients which I thought were suitable subjects for experiment, and I am happy to say that they were delighted with the change of treatment,

for reasons which will be explained as I proceed.
The first, was J. O. Bryen - a sailor, aged, 18, suffering with a chancre, which had been touched with nitrate of silver to no purpose. I applied the sulphate of sanguinarina only twice, with the result of completely destroying it.
The second was John Stuart, also a sailor, aged, 40, suffering with venereal wa to on the glans penis as large as ~~a~~ small crab-apples. I touched them with the sulphate every other day. After the crust formed by each application had separated by ulceration, the remaining portion of the wart presented a honey-combed condition. Nitrate of silver had been used with no effect, also the caustic collodion, made by dissolving one part of corrosive sublimate in seven of collodion, the latter caused such excruciating pain that the

patient would not bear it.

The third was Patrick Garrigan, clerk, aged 28, laboring under secondary syphilis, he had a large and burrowing bubo in one groin, and a large wart about an inch and a half below it. The glans penis was encircled with warts. Nitrate of silver had been used without benefit; the acid nitrate of mercury was then applied, which no sooner destroyed the warts than they returned again, spreading in every direction. On this account and in consequence of the great pain the remedy caused it was discontinued and the warts allowed to return in increased numbers. I then applied sulphate of sanguinarina which destroyed most of the warts and prevented their return.

The great advantage the sanguinarina has

over other escharotics, although less powerful and efficient than some, is that in addition to the alterative properties claimed for it, no pain whatever is inflicted by its use. The patients on whom I used it freely, only complained of a tickling sensation, which lasted about an hour. I regret that I could not see the complete cure of the last two cases mentioned, being obliged to leave the hospital about that time, for Baltimore, to attend the lectures.

The bloodroot itself has been highly recommended for its expectorant and alterative properties in various pectoral affections. It is esteemed by some as a highly valuable remedy in the advanced stage of pneumonia. It has also been found useful in bronchitis, acute and chronic, in asthma and pertussis and has

been used with supposed advantage in rheumatism, and as an alterative in diseases of the liver. In January 1865 I made a syrup of sanguinaria which has been used exclusively both in the wards of the Episcopal Hospital and at the dispensary by all the attending physicians, and with marked advantage. I used it in several cases of bronchitis and found it a most efficient remedy; it very soon relieves hoarseness and promotes expectoration. The patients expressed themselves as being very greatly relieved after each dose. I combined it with syrup of tolu that it might be more palatable. Acetate of morphia was added when necessary. Professor W. R. Smith has used the root in his practice, and speaks very highly of it as a remedy in

bronchitis; he informed me that his father the late Professor Nathan Smith, had long been in the habit of using it in croup.

Administration.

The dose of the sulphate of sanguinarine for the emetic effect is half a grain, which may be repeated if necessary. For children the dose must be reduced in proportion to the age. It should preferably be administered in the form of pill, in consequence of its irritating effect upon the fauces, when given in solution. For children one grain may be dissolved in two fluidounces of syrup of tolu or simple syrup, of which the dose would be a dessertspoonful, repeated as often as required, as in cases of croup. For its sedative influence it may be given in doses of from one tenth to one sixth of a grain, repeated at short intervals. As a nauseant

and expectorant it may be given in doses of from one sixth to a quarter of a grain, the latter dose will always produce nausea in a very short time in most persons. For its expectorant effect it should be generally given in the syrup of tolu. Diluted in this way the sulphate is not at all objectionable; the acetate however is less so. The alkaloid itself is void of all unpleasant taste, but being insoluble in water its salts are prefered. I see no objection to its being used, for the acids in the stomach immediately convert it into a soluble salt. It may be given either in pills; or powders mixed in syrup. As an escharotic I used the sulphate in the form of powder, by means of a camel's hair pencil, previously moistening it on a slip of glass, and following immediatily by a coating of collodion, the latter

prevents the clothes from rubbing off the sulphate, and protects the parts from the air.

Of the modes of administering the blood-root itself I have but little to add from my own experience. From 15 to 30 grains are said to act as an emetic. Dr. Eberle used the tincture for the relief of cough attending pulmonary consumption, in drachm doses every two hours until it sickened the stomach. Combined with an equal quantity of tincture of lobelia it has been found useful in asthma. The syrup which I prepared, is made by gradually pouring diluted acetic acid over one ounce of the root, packed in a glass percolator until half a pint of filtered liquid has passed, to which add one pound, avoirdupois of white sugar and make into a syrup. The dose for an adult as an expectorant is from half a drachm to a

drachm; in larger doses it will prove nauseant and emetic. I have found the following mode of prescribing it very useful as an expectorant.

℞. Syrupi Sanguinaria
Syrupi Tolutani āā ℥iss.
Morphiæ Acetatis gr. j vel ij.
M.

Sig. Give a teaspoonful every three hours.
The medicine is sometimes given in the form of infusion, made in the proportion of half an ounce to a pint, of which the emetic dose would be about a fluidounce. The watery preparations are more nauseating, but less bitter and acrid than the alcoholic, owing to the difference in the solvent power of each. Water dissolves quite a large proportion of the active principle, leaving behind the stimulating and inert matter

as resin, extractive, &c; which abound in large quantities in the tincture. The late Professor Nathan Smith, alluded to before, prefered the simple infusion to any other preparation of the plant. The powder was considered by him too harsh and the tincture less efficient than the infusion. His opinion was undoubtedly correct. I consider the syrup a more eligible form than the infusion, because we have combined with greater efficiency and smallness of bulk, a preparation which will keep and is more palatable. Diluted acetic acid being the menstrum employed in making the syrup, it extracts all of the active principle from the drug, with a comparatively small quantity of resin and other matters which render the tincture objectionable. The infusion contains still less of these impurities,

but very much less of the active principle also. It more nearly resembles the sanguinarina in its action than any other preparation of the root, and in cases of croup where the latter is not used it should be preferred.

The alkaloid should have the preeminence in this disease, because combined with its other properties, it is a certain remedy of uniform strength, and is sedative in its action upon the system.

Sanguinaria has been employed topically for various purposes, the powder mixed with camphor has been used as an errhine in coryza; it is said to have repeatedly caused the disappearance of soft polypi by being occasionally snuffed up the nostrils. It has also been applied to fungous ulcers as an escharotic.

The vinegar of sanguinaria has been applied to tetter and ringworm, and also for the cure of scald head. As a gargle in the sore throat of scarlatina, and as a stimulant to ill conditioned ulcers. It has been used successfully, and is thought by some to be a very superior remedy in scarlatina. A cerate is employed as a healing agent in certain localities. For all of the purposes above mentioned the salts of sanguinarina may be employed, and will probably be found far more efficient and manageable.

Having written the above dissertation as fully as my limited experience will allow, I respectfully submit it to your consideration.

Benjamin L. Bird, Jr.

An Inaugural Dissertation

on Pharmacy

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, Joseph. T. Claridge

Session 1863.4

Pharmacy

Materia Medica.

is the science which treats of medicinal substances. & may be sub-divided into three parts

First — Therapeutics the application of remedies to the treatment of disease,

Second Toxicology. the consideration of their poisonous Effects;

Third — Pharmacy or the art of compounding, preparing and dispensing medicines for use; A complete Knowledge of medicines includes an acquaintance with their physical characters. such as colour, taste

order. general appearance; their chemical properties; their natural and botanical history; their modes of growth. collection, and preservation. the commercial history botanical and chemical properties, the manufacture and preparation of medicines, are so well described in our Dispensatories and Pharmacopoeias, that it would be superfluous, to enter on that subject. I will therefore, proceed at once to the consideration of the more important and practical part of pharmacy, namely the art of preparing and dispensing medicines, the Extemporaneous

admixture and preparation of medicines from the Prescriptions of medical men the supply and administration of remedial agents to the public constitute the primary object and duties of the Pharmaculist, the duties of the dispenser are of a very important nature, and for their discharge a certain combination of qualities is required in the individual who undertakes them, with some degree of physical strength & agility. he should combine a quick perception, sound judgment and firmness of resolution. he should maintain a constant and lively attention to

every operation (however trifling) with which he may be occupied & evince, both by night and by day a readiness to fulfill his duty in serving others, even at the sacrifice of his own pleasure & convenience, and above all he who prepares the dose for the sickly and often fastidious patient should be careful that he add no extraneous repulsiveness to that which of necessity belongs to the prescribed remedy. The most responsible and delicate part of the dispensers art is the reading understanding and preparation of the Physicians. Prescriptions When a prescription is

presented for preperation the first thing to be done is to read and understand it. This is sometimes the most difficult part of the Dispensers duty, requiring the Exer-cise of serious attention, quick preception. Sound Judgment and prompt decision. The writing in prescriptions is often very bad and the words are mostly abrev-iated. Moreover the language in which prescriptions are written is in many cases, very imperfectly known to both writer and reader. There are, it is true, but a limited number of formal Expressions, which are commonly used for

conveying the requisite instructions and a knowledge of these is easily acquired; but the Pharmaceutist will not be qualified in his duties as a dispenser, if he possess only a knowledge by rote of the expressions most frequently used in prescriptions. the prescription is intended as a medium of communication between the prescriber and dispenser and an acquaintance with the language in which it is written is quite as requisite to the latter as to the former. The dispenser has a two fold difficulty to contend with; he must first decipher and then translate the

writing. if the prescription moreover. he must not only do this correctly but promptly. If he stands poring over the prescription for a long time. it may induce a supposition on the part of the Customer that either he is ignorant or the Physician careless. Nothing should be done that could possibly tend to weaken the confidence of the patient in Perscriber or Dispenser. The prescription should be first looked over with a view of determining certain points. the knowledge of which will greatly facilitate the comprehension of minute details. the questions relating to

this point will present them-
-selves somewhat in the following
order, is the medicine intended
for internal or external use; is it
to be in the form of Pill, Powders,
mixture ointment or what other
form; what is the quantity ordered
and what is the dose. These points
being determined, a more care-
ful examination of every word
and symbol must follow, with
the view of fixing definitly on
the mind what are the several
ingredients ordered and the directions
with reference to them, should a
doubt arise in deciphering the
names if any of the ingredients

the knowledge of the purpose form and method of administer-
-ing the medicine. will aid in the decision of such points by affording suggestions as to what would be suitable and what ina-
-ppropriate. It is much better to meet any difficulty that might arise with the previous knowledge of every attainable fact that could assist the judgment rather than to seek these aids after an a erron-
-eous idea had been impressed upon the mind. In deciphering the writing it will be found advantageous to compare the characters in a doub-
-tful word with those most nearly

resembling them in some parts of the prescription which is intell-
-igible. Should the difficulty still remain then the Opinion of a second party when available should be sought: and in doing this let not false pride prevent the Inquiry being made from others who are capable of Judging. Such Inquiries should not be made in presence of the Customer. Sometimes a word may occur in a prescription which is quite legible but the meaning of which is not understood; in which case referance should be made to a dictionary or other

books in which the terms used in prescriptions are Explained; and in this case again, it should be done without exciting the suspicion of the customer that any doubt exists as to the meaning of the prescription. If after adapting all these means, it be still found impossible to read or to comprehend the Instructions contained in the prescription, it will be the duty of the Dispenser to ascertain who the Prescriber is and to apply to him for Explanation. If the medicine is wanted for as little delay as possible should occur

before its preperation is com-
-menced. A good and accomplished
Dispenser will make it his study
to inspire a belief that he
quickly comprehends & promptly
executes the orders which are
entrusted to him. The wretched
character in which a large
number of prescriptions are
often couched, add greatly to
the other perplexities of the
Dispenser. Long practice however
which gives familiarity with
a great variety of hand-writings
will enable one to overcome, in
a great degree the ill effects of
the careless chrography of medical
men

Medicines are used in the solid or fluid state and these may be sub-divided as follows

Solids
- Pills
- Powders
- Confections
- Troches
- Electuaries
- Extracts

Fluids
- Decoctions
- Infusions
- Solutions
- Medicated Waters
- Tinctures
- Wines
- Spirits

Fluids { Ethers
Oils
Syrups
Vinegars
Oxymels &
Honeys }

Misturae, the term Mixture is generally applied to a liquid medicine not intended for local application, which is administered by the mouth in an undiluted state and of which the bottle in which it is dispensed contains more than one dose. It is a very common form for the administration of medicine. The ingredients

which usually enter into the composition of mixtures are salts and other solid bodies which are soluble in, or easily mixed with aqueous menstrua, together with tinctures, spirits, syrups, infusions, decoction, and distilled waters. In preparing a mixture the dispenser has to consider how he can best effect the solution of solid substances which are soluble the equal diffusion of those which are insoluble throughout the menstrum and the intimate admixture of all the ingredients of whatever kind, so that

every dose, when taken shall be of similar composition, it is not necessary, nor is it always desirable or even practicable to mix the ingredients in the order in which they are named in the prescription. The dispenser is expected to exercise his judgment in determining the best method of effecting the combination. The ingredients of powders are mixed in a mortar or on a smooth piece of paper, as a general rule a mortar should be used, except when the prescription is for one dose, or when the quantity used is so small

that it is necessary to avoid losing the portion that would adhere to the mortar and pestle. It is important in all cases, that the admixture of the ingredients should be effected as completely as possible & more especially when as is often the case the ingredients are of very unequal degrees of activity; The order in which Powders are to be mixed is the reverse of that which is adopted in introducing the ingredients of a mixture into a bottle instead of beginning with the least bulky ingredients. the most

bulky or the most inactive ingredient should be put in first and the more active on top. the object in this is to avoid as much as possible, the loss of any part of the active ingredients by their combination being taken up in the pores of the mortar. The combination is effected by trituration, which should be continued long enough to insure the perfect distribution of the ingredients, due regard being paid to their activity, bulk, specific gravity, &c. Substances of various texture and density are associated in prescriptions; such as Crystals, Gum

resins leaves and roots and as it is a common custom to pulverize many of the substances after they are weighed the dispenser has to exercise care and judgment as to the order of their introduction into the mortar when camphor is to enter powders, it should be first thoroughly triturated up by the addition of spirits of wine then if any other substances require trituration, the camphor is removed from the mortar, and these are reduced to powder. the camphor is then returned, and by a gentle rotary movement of the pestle, the associated powder is mixed with

it: without much pressure at first so as to avoid conglomerating the camphorous particles before they are covered with the other powders. There is probably no form of medicine more frequently prescribed than that of the Pill. It is a form well adapted for the administration of medicines including those of a pelid or nauseous character - those whose specific gravities render them difficult of administration when mixed with liquids - those which are designed to act slowly. Such as alteratives and those whose action is designed to be retarded

untill the medicine shall reach the lower intestines. Among the substances which enter into the composition of Pills, are the vegetable & other Extracts, the Resins Gum Resins, Balsams, & Essential Oils those are more frequently administered in the form of Pill than in any other form, and with them are combined many powders and mineral preperations. The Object in forming a Pill-mass is to obtain a consistent firm & adhesive paste, which shall be sufficiently plastic to admit of being moulded without adhering to the mould and sufficiently stiff to prevent-

the Pills from losing their shape when made into proper form. a pill-mass may be said to consist of two essential parts - the ingredients which enter into its composition and the excipient - by which the proper degree of consistence and tenacity are given to the former. The substances employed as excipients in pill making are numerous and of very different natures the most common are syrups mucilage. Soaps water spirit or tincture gum. sugar. magnesia & starch. The principle art in pill making consists in selecting the proper substances as excipients to suit

the peculiar nature of the other ingredients of the Pills. Those Sub-stances only should be used as Excipients which fulfilling the specific requirements in other respects will not be incompatible with any of the ingredients of the pills; will modify their action as little as possible - either by causing them to become hard or in any other way - and which will not unnecessarily or inconveniently increase their size. The Physician frequently names in the prescrip-tion some particular Excipient - which is to be used when ever this is done the instructions of the

prescriber should be carried out if practicable; otherwise, the dispenser must follow his own judgment. It would be much better that the selections of excipients in these cases should be always left to those who dispense the medicines, as the prescriber rarely possesses the practical knowledge requisite to enable him determine what kind of excipient is required. We frequently find two or three soft extracts which, when combined are so soft to admit of being properly made into pills ordered to be mixed with mucilage or syrup" quantum sufficit:"

In this case although the Dispenser cannot act up to the letter yet he may carry out the Spirit of the Instructions by using Gum or Sugar - it is not my purpose nor is it necessary on this occasion to Enter into the History of Pharmacy Suffice to Say that it is coeval with the "Healing Art"; the History of Pharmacy being the History of Medicine; one being the Handmaid of the other Some of the most Eminent Physicians of the last and present Century Commenced their Professions as Apothecaries. And Pharmacy herself can proudly point to her Children who either as

chemists Philosophers or Apothecaries
have wreathed on her brow a crown
of living light- still shining un-
-dimmed by other suns-

An
Inaugural Dissertation
on
Syphilis
Submitted to the Examination
of the
Board of Medical Faculty of the
University of Maryland
For the degree
of
Doctor of Medicine
By
Wm. Pratt
of Maryland
February 1st. 1844

Gentlemen: In presenting you this my Thesis, I have to thank you for the able manner you have brought to my view the hidden treasures of medical science, and my highest ambition will ever be, never to disgrace a teaching and precepts of her professors.

The subject which I have chosen is "Epilepsy." I do not expect to be able to advance any ideas which may prove either interesting or new, but

will be satisfied if it not propagate false doctrine.

This disease is an old companion of the human family, and is a certain effect veiled in mystery. That it is one of the most loathsome maladies with which we are visited, one has only to see the wretched victim to be convinced

The first appearance of primary symptoms of syphilis is a small ulcer commonly called chancre which is always produced by direct contact with the syphilitic virus, and that most readily during the act of

vation, although this is the most common method inoculation may take place by any means through which the virus is brought into contact with the surface, either mucous or cutaneous, not confined to the mucous membrane of the genitals.

In males their favorite seat is upon the fossa between the prepuce and corona glandis, and inner surface of prepuce; although not by any means confined to that situation

There is much diversity of opinion as to the time a chancre appears after inoculation.

John Hunter says: "I have seen the chancres appeared in 24 hrs after inoculation and I have known them to be delayed seven months;" but the average time of appearance is from the 6th. to the 10th. day; and the average duration is according to Wallace "35 days."

There are many kinds of chancre, or primary sores, which have a grand division into those which are merely a local action, and those which affect the system in general; passing the whole frame, and becoming constitutional.

Lawrance divides syphilitic sores into two sections.

Sphacelus, into four kinds comprises all. 1st. Gangrenous true or hard chancre, a variety of venereal sore situated upon an indurated base, so that the edges of the base upon which it rests present a pedunculated hardness.

2nd. The simple non-indurated or pustulous ulcer, a very superficial ulceration occurring most commonly upon the inner surface of the prepuce, usually there are more than one.

3rd. The phagedenic or, as some make a 4th division, the sloughing. The 3rd variety is characterized by a loss of all re-

produce a process, the edges are undermined, and ragged. In the 4th. division there is lip relaxed, and the surrounding tissue is highly inflamed.

Such an chancre is the one which is poisons and contaminates the system, that life is burden to the unhappy sufferer.

It may appear upon the common integument as a small pimple or excoriation, which upon healing leaves the entire element, and has the feel of a bony or cartilaginous deposition of a circular or approaching a circular shape, with the raised terminating ex-

rapidly, the stamp of [illegible] inflammation of action, together with its negative signs viz: the absence of suppuration, and surrounding redness, which is so characteristic of inflammation, aid at the diagnosis.

Non-indurated or suppurating chancre, is no [illegible] pure of syphilitic sore.

Mostly found on the prepuce near its internal or upon its external surfaces, also in the fossa around the corona glandis.

It first occurs as an itching pimple or pustule, which, when it bursts exhibits a foul brownish surface of a circular form with

Slight oedema and redness, and may throw out indolent fungous granulations; it heals very slowly and if healed near, or upon the frenum it almost always perforates it, causing phimosis.

3rd. Phagedenic chancres are very rapid in their progress, have a corroded appearance, with no granulations whatever.

It most frequently attacks the prepuce, which it often entirely consumes and continuing its depredations on the glans and corona, often effects their total destruction.

They are acutely painful

and discharge a thin ichor.

The sloughing variety is still more untractable and destructive, than the phagedenic, a small black spot and a pain of shot with in size and color, which can readily be recognized as a slough or mortification extending to some depth below.

The slough advances until it engages a portion of the penis, upon a line of demarkation can be drawn between the mortified and sound parts which does not leave a clean granulating sore as occurs usually in simple mortification

The system strongly sympathizes. There is a strong full pulse, a white tongue, and in fact the general symptoms that characterize high inflammatory fever.

A chancre may occur in the urethra, and if care be not taken, will very readily be mistaken for gonorrhœa.

It may be suspected by the character of the discharge, which is sometimes thick and purulent, and particularly if a hard or indurated spot is felt.

The stubbornness of the disease under treatment is proverbial

for gon. rhea, but the only con-
firmation we can rely upon is
inoculation with the discharge.

There is but slight if
any modification of the disease
as it occurs in females, perhaps
some lip painful but harder to
heal.

Those situated within the
vagina can be examined only
by the speculum.

There has been great
discrepancy among authors as
to the treatment of chancre, some
recommending alterative treatment,
as Iodide, Iodide Pot, or some one
of the mixed preparations of mercury.

in all cases of syphilis as soon as you are satisfied as to its diagnosis.

Allow using alterative treatment only in the Bubonic variety.

That the non-venereal variety is merely a local affection is clearly evident; although from the violence of the local disease the constitution may in a great effect sympathize, yet is never contaminated with syphilis. in fact it may almost be considered a different genus and is a variety of the same disease. If we there the reports of many

[illegible]

after a soft chancre, that they ci-
atrize, with no other inconvenience
than a scar proves conclusively
that indurated and non-indurated
chancre are to a very great extent
distinct.

The indications for
treatment are first to cicatrize the
ulcer, second, to heal the breach, and
third to prevent secondary infection.

[illegible]

[illegible]

[illegible]

I have often in those cases seen relief a very troublesome complication, given by hydrocyanic acid. Nitr. argent. in almost every case relieved it.

In combination with the other treatment, rest, and unstimulating diet, all ordinary cases will yield to this mode of treatment.

But should it present unequivocal marks of induration, or there is much sympathetic irritation with severe symptoms, instead of applying weights, we may use black or yellow wash, or injection of the entire scrotum, taking care

recommend the application of Nitrate of Silver or Nitric acid and various other agents of this class with good effect.

Most generally after a short time the glands of the groin are sympathetically enlarged and inflamed.

There may be but one affected, which is called a bubo, or there may be many, which are technically termed multiple Bubos.

Bubos arising from soft chancre almost invariably suppurate. Those from hard chancre very rarely suppurate.

Nevertheless there are many deviations and exceptions to the above rule.

There are [illegible]

1st. By [illegible] inflammation.

2nd. By propagation of inflammation without regard to its cause, whether slight, chronic, or any other kind; [illegible]

Diagnosis; if the swelling occurs about perineal ligament, and the patient has, or the patient has had [illegible]

Bubo should be indurative like
[illegible]
likely it is produced by some
irritation of the foot or leg. Like
chancre whenever there is doubt
as to its character, it can be
confirmed by inoculation, as in
this disease we have the rule "like
produces like" and in [illegible]
virus will produce chancre.

Treatment: Bubo must
be treated as an abscess occurring
in any part of the body, by cut
antiseptics, fomentations and
leeches. Good when tendency are
low relieved, by placing a wight
from the [illegible] gland, a small

ter of Shot in the test in the right will be more equally distributed.

Painting with Tr. Iodine, and if it goes on to suppuration must be opened and poultice applied. to cause the opening to heal from the bottom. the cavity must be filled with lint.

Often we will be forced to use some stimulating lotion on account of it indolence, nitr. silver: wash will be found very efficacious.

When the disease passes into the second stage, called secondary infection, which occurs in about 6 or 8 days after the primary symptoms, the ven-

constitutional symptoms are manifested, in a variety of troublesome and disfiguring affections.

It would be superfluous to dwell upon the disastrous influences this foul disease has exercised upon mankind for the last three centuries. How it has poisoned the springs of life, equally in those who be innocent and guilty, How loathsome it was rendered by illiberal measures, and imperfect treatment. And who has not deemed some of our fair delinquents once adorned by freshness and youth, turned into objects of disgust and commiseration. Let us not therefore

[illegible]
[illegible] of the [illegible]
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
Some one of the above mentioned
[illegible] [illegible] [illegible] [illegible]
[illegible] applied consisting of [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] should be kept [illegible]
[illegible] will be [illegible] during the [illegible]
[illegible] of the disease.

Frequently from the re-
dence, and long duration of the
disease the system becomes debilitated,
and requires Chalybeates and Tonics,
such as Tart Ferri et Pot. or Cit Ferri et
Pot. will be found among the most

ident in our contest with this
loathsome contagion.

Most generally it first
appears in the form of the secondary
venereal disease, attended with
more or less severe pain in the head
shoulders, and large joints which
ushers in an eruption, which usually
appears upon the chest, back, fore-
head, and extends in a more scat-
tered way to the extremities

They vary from a pale
red, to a deep crimson; their color
in the latter stage becomes paler
and assumes a copperish hue, while
exfoliation of the cuticle gives the
appearance of scaling, which, when

it falls off leaves that characteristic face called after and little of a pustule upon exfoliation.

Scaly eruption is only an aggravated form of the above vesicular papules. These rise in clusters, after remaining for a short time they vesicate and exfoliate, that desquamation coming off passes into the Scaly State.

Pustular eruption; large, prominent pustules with a copper colored base, terminating in ulcers covered by crusts.

Tubercular consists in tubercles of a red copper colored appearance, forming most frequently

upon the alae of the nose or on cheeks which terminate in deep circular ulcers.

The eruptions likely to be confounded with syphilis are the diseases which arise spontaneously from a disordered state of the constitution and in many assume the form of the tubercular eruption.

But after ulceration, the sores are not so extensive, jagged and painful as those arising from syphilis. Treatment for venereal eruption and sores is citric acid wash, with no any internally. These eruptions are most at the driest time and

the patient lives in dread of a miserable death. "Dread makes a death which nature never made."

"Then on the point of [illegible]
"And feels a thousand deaths in fearing one."
"Then cease not the poor last breath with every ill,
"That proved in going can but end it."

Corpa inflammation of the mucous membrane of the throat often begins itself as a simple catarrhal affection, with stopping of the nose, cough, difficulty of swallowing, and upon making an internal examination, in the early stage we discover the uvula red and swollen, the palate, fauces, and in fact the mucous membrane in general inflamed and [illegible].

The inflammation sometimes assumes
a syphilitic character, which [illegible]
three kinds.— the Scooped out or excavated,
which has the appearance, as if a portion
of the flesh was cut out, and has a
very foul, and [illegible] offensive,
and often [illegible] the patient
speech, or [illegible] may be [illegible]
ing ulcers, with [illegible] the system through
sympathy.

In both [illegible] with
[illegible] blood they [illegible] on, attack
the bones of the head producing a very
[illegible] secretion.

In addition to the above
consequences [illegible] also
even worse affections upon the unhappy

reative — such as iritis, producing very often blindness consequent upon iritis, nodes, if syphilitic tumors, syphilitic rheumatism, syphilitic ulcerated syphilitic disease of the bones which are sometimes termed tertiary syphilis accompanied by nodes and sometimes enlargement of the glands.

There is much shown in the way of a correct diagnosis, on account delicacy or ignorance on the part of the patient.

Said if he should at any time, question the man in white cotton colored blotches, had sore throat, sore eyes, rheumatism, falling off of hair or nails — a general un

healthy appearance, or nodes, we have a pretty clear case of Secondary Syphilis. Prognosis is somewhat uncertain, modified by [illegible] if complicated with any other malady the danger is much enhanced, a recent case makes the prognosis much [illegible] favorable.

The diseases of the bones more easily healed than those of the skin. Cure more easy and satisfactory in men than in other women.

Syphilized women bring forth unhealthy children, [illegible] the disease from the parent.

That Syphilis is contracted only by the direct application of the

[illegible]

[illegible]

[illegible]

may be syphilized from either parent and [illegible] it is [illegible] to be born tainted from [illegible] and "vice versa" (of course I refer to secondary syphilis [illegible] is a

[illegible] the medium of doctors, who having the distinction [illegible] the father may transmit it to the mother. Yet the mother being syphilized may infect the child and the father be free.

In fact it is a much mooted point whether secondary syphilis can be transmitted at all

[illegible] completely leave organism. Hence
is inclined to think that something
is always left and that the disease
is never eradicated.

There is at present a
[illegible] has been much [illegible]
among authors, as to the proper
treatment for syphilis, and [illegible]
has most particularly to consider
syphilis. In primary syphilis, should
the case be seen early, with a local
marked chancre, it will be advis-
able to destroy it promptly by a
cauterization [illegible] and
dust powder, or wrap the penis in
a wet rag. But should there be much

inflammation, or the evidence of a tendency to, the treatment should be black wash, emollient applications.

When there is clear evidence that the disease is in the premonitory stage, and there is no contraindication for its use, as chronic cachexia, we may use mercury to excess for its specific effects, for it has proven its efficacy.

It should not be used to produce these effects, gradually and gently, to bring the system under its influence, and to maintain it for some time.

Almost all the preparations of mercury have been recommended in the

both Cider-Syrup, Maple Syrup, and [illegible]
think the last, is as much as it con-
tains Iodine in combination with
Mercury, and Iodine is an alterative
of high repute in the treatment of
[illegible] malady.

The mercurial impression
may be produced by fumigation, or
[illegible] the Skin, or upon a surface denuded
of its cuticle.

The patient should take
care of his diet. It should be nourishing
and [illegible]
above all avoid fatigue, and the
vicissitudes of the weather. Should

the mercury produce irritation of the bowels, the medicine may be discontinued for a few days, or a milder plan would be to use some astringent in combination with the mercury.

Violent salivation should be carefully avoided, and should it occur the best remedy would be chlorate of potash or the chlorid of potash. The condition of the system often superinduced by mercury, prior to its long continued use, is best relieved, by abstaining from the cause, change of climate, and tonics as Nitric, Iodide Pot.

In mercurial salivation the throat and palate a gargle of hi-chlor,

Hydrat. Tannin. or Sil. Nit. it may be
used with advantage.

Mercurial inunction in
infantile mortality. The skin and
lungs is my object with effect
more to the mine can reach fast
sick providing must be given up
[illegible] will [illegible] is the
most recommended particularly in
view on view of [illegible]

[illegible]
[illegible] the [illegible] is [illegible]
by [illegible] [illegible]
in the use of Urgt. or Hydrat. [illegible]
together with constitutional [illegible]
[illegible] kidney, [illegible] [illegible]
will be sufficient or with use Hydrat. [illegible]

[illegible]

[illegible] other cases of secondary

[illegible] inflammation [illegible]

treated with mercury and Iodide Pot-

[illegible] mercury and iodide also

both used with advantage

Iodide Potassa is a [illegible]

valuable remedy. [illegible] from

irascibility or some other cause the

patient cannot take mercury.

In the treatment of

nodes and various affections of the bone

Iodide Potassa [illegible] and [illegible] may be tried either with Potassa or

with mercury. [illegible] irritation

by blisters behind the ear, and ac-

cording to some influence [illegible]

Besides the preparations of mercury before enumerated there are many other remedies recommended by different authors as Pot. Hydrar.-Bromide and solid mercury-cyanide of mercury, and various other "medicines" have been used with reputed advantage. Camphor may most always be used with advantage, for its slight Tonic, and by some, claimed alterative properties.

Nitric Acid has been used, and recommended by some

The Iodide of Potassium is very reputed now, and may be tried. There are some who advocate the treatment of syphilis on the sole mercurial plan of various medicines may be used

[illegible]

[illegible]

[illegible] in utero, during birth, or from sucking a diseased nurse.

Mothers affected with [illegible] he could be given rather, [illegible] is syphilized. It may be born perfectly healthy, or apparently so, and [illegible] break out upon it in a short time after birth.

The diagnosis is to be formed partly from history; but in investigating this point mother is

necessary, a slight hint on the Physician's part might lead to very unhappy fatal results.

The remedy of epilepsy was nothing to violate the common common sense, and the epileptic is most apt to be mistaken for common sense.

It is to be known from a fit of its peculiar character.

Prognosis is favorable when very early and properly treated. It is to be, a great mistake in certainly stale.

Treatment should either prevent a recurrence by the course of mild course of mercury or Tolassa

Should it weak, the child may use small doses of Hydrocyanic acid, in [illegible] until the eruption disappears. Should it not be [illegible] you may combine a little Dovers Powder with it. Black wash, or citrine Ointment Hydrar may be applied to the sores

W. L. Jarrett
Maryland
February 14th. 1864

An
Inaugural Dissertation
on
Gun Shot Wounds.
Submitted to the examination
of the
Provost, Regents, & Faculty
of Physic
of the University of Maryland
for the
degree of Doctor of Medicine.
by
James T. Crickshank.
Anno Domini. 1864

Under the term Gun Shot wounds, are included, all the injuries caused by the discharge, or bursting of fire arms; or those inflicted by the explosive power of powder.

First injuries inflicted by gun powder alone. For example if a man should place his hand immediately over the muzzle of a gun in all probability it would be blown off by the discharge. The grains of gun-powder would be sufficient to produce this result, also assisted by the air which is driven out with much force. This of course would only happen in close contact at a distance of a few feet or yards no dangerous results would be produced. But in close contact it would make a very bad lacerated wound.

If the gun was fired at a short distance, the gun powder alone might knock the person down, without producing any serious injury unless the face being struck the grains of gun powder might enter the skin, and thereby producing considerable irritation and inflammation might and likely would follow, and sometimes bring on an Erysipelatous inflammation.
Treatment for such cases. Remove every grain of gun powder that is possible, remove the wound with a needle, then apply the iced water, after which treat it in the same manner as an ordinary burn, if there is much pain use the watery solution of prussic Acid, gently washed in. If hard

and damp, they may be capable of producing serious wounds, making a very ragged wound. Injuries caused by small shot. If fired at a distance of thirty yards they would not inflict a serious injury without striking the face or eyes. If a shot penetrates the eye the loss of sight will generally follow; but shot has penetrated the lung, and even the brain without producing fatal results. Instances of the kind are related by our Esteemed Professor Surgery N. R. Smith the wound being caused by very small shot. But when fired en masse the destruction of all the parts are inevitable. Consequently causing a very serious and dangerous injury. Shot will sometimes penetrate arteries, and produce aneurisms. Treatment. Place the patient at perfect rest, and

use warm applications first, but when inflammation has set in use cold applications. If the shot are deeply seated, and cannot be easily felt, do not search for them, or attempt to extract them. For by so doing you cause great irritation, and have without accomplishing any good. Wounds inflicted by balls. A ball fired from a smooth bore gun, will go as far as one fired from a grooved bore, but with not so much accuracy. The ball fired from a smooth bore will acquire any, revolution, but from a grooved bore only acquires one revolution. Rifle balls inflict a different kind of a wound, than musket balls. A wound inflicted by a rifle ball lacerates the part more, and makes a larger wound than a musket ball, also the rifle ball is conical in shape, and often revolve in the part after being struck, causing a

considerable wound. You will often find the base of the ball at the bottom of the wound. Bullets generally pass directly through it; the orifice of entrance is smaller and indentated, and not much lacerated and somewhat blackened; the exit is lacerated, and larger and not so much blackened. As the ball enters it finds something to oppose its progress, and consequently it does not lacerate so much, but in coming out it drags the integuments before it, producing the results before mentioned. A conical bullet striking an artery, will divide it in the same manner as a knife; consequently much hemorrhage will take place, but on the other hand, if a spherical ball strikes an artery, it will lacerate its coats, not so much hemorrhage will follow, but you must look out for secondary hemorrhage, which often follows.

Balls are often turned from their course. There are many cases of this kind related, where great deviations have taken place. A bullet striking a bone is often turned from its course, also by striking soft integuments, in fact they cause bullets oftener to deviate from their course than bone, the bone when struck is apt to be broken, whereas the integuments give way and yield to the ball. Bullets may also be divided into two or more fragments, by striking the spine, or sharp point of a bone, and it sometimes happens that the ball strikes some hard substance before entering the body, and is split into two or more pieces. Balls have often been prevented from entering the body by something carried about the person, for instance

a coin carried in the pocket, have prevented the ball from entering the person, and it very often happens that the coin is driven in before the ball. Bullets may strike a bone, and carry some part of it to some other part of the body, and producing a dangerous and perhaps fatal wound. Where there is but one orifice, it is generally taken for granted the ball is still in the wound; but this is not the case in many instances, as it has been ascertained, when two balls, without, have entered and concent the same orifice. Bullet wounds are likely to be attended with disastrous results, even the simplest of them. So dangerous were bullet wounds when first invented, that the parties were accused of shooting poisoned bullets.

They partake of the character of a lacerated, punctured, and contused wound. Therefore they are attended with more irritation and inflammation - often followed by sloughing. If a bullet strike the shaft of a bone with force it will break the bone, and probably make a comminuted fracture; but if moving with a short velocity it will generally only break the bone. When a bullet strikes the head of a bone, it will likely go through without fracturing the bone. These wounds may not be attended with any disastrous results, unless the joint is disorganized; thereby producing necrosis. Sometimes a bullet may enter the head of a spongy portion of bone, the wound of entrance in such cases being smaller than within, so that it

may be impossible to withdraw the bullet. Gudrie often found that a simple gun shot wound will give much trouble, and be attended with unfavorable results; the clothing is often drawn in the wound, or some other foreign substance, or it may happen that a bullet strikes a bone and is divided into two parts, one part going out, and the other remaining in the wound, leading the Surgeon to believe that the ball has passed out leaving the wound open. But if you have reason to believe there is no foreign substance in the part, it will never be proper to probe the wound for you will be certain to create great irritation, and likely to bring on hemorrhage. Treatment. If no foreign substance is in the part, and the ball has passed

through a mans thigh. Keep the patient at perfect rest, in a short time irritation will come on, followed by inflammation. In the first place promote reaction, place the patient in a recumbent posture, and give some diffusible stimulant, then apply warm applications, say the heat the watery solution of opium or lead, with other warm applications if found necessary. When inflammation sets in, it may be proper to apply a few leeches, and also begin the use of cold applications to the part. When there is much tension, you will find warm applications to answer best. Suppuration will take place in a few days; sometimes the wound will heal by the first intention, but not always such a favorable result. Often the part is put violently upon the

stretch, if the pain is great, and warm applications do not prove beneficial, incisions must be made dividing the skin and aponeurosis, by this great relieving the tension and pain to a great extent. Be careful not to make your incisions across the muscles or nerves, but cut parallel with them, then renew your cataplasms. Treatment of a bullet lodged in the part. It will be necessary to probe the part, but before probing notice the opposite side, the bullet may in all probability be found near the surface, and thereby avoiding the probing, which is always capable of producing more or less irritation and mischief. If the ball has passed in a curved line, there may be a discoloration of the skin, caused by the ball running near the

surface. When you use a probe, use one somewhat obtuse at the extremity; sometimes you will find some difficulty in following the course pursued by the ball, the ball taking a circuitous course. If you touch the ball with a probe, it will be necessary to use forceps in the extraction. There are various kinds of forceps used for this purpose; there are also extractors for taking balls out of bone when lodged, but you will generally find it necessary to apply the crown of the trephine before it can be accomplished. You will also find it necessary quite frequently to dilate the wound before you can use the forceps. But if the ball is deeply seated, and lodged among important organs, it will generally be best not to extract it. The proper period for extracting balls, is when the

wound is just inflicted; secondly after suppuration has taken place. But it will not be proper to extract balls, when the part is in a high state of excitement or inflammation. If a ball has passed close to a main artery, although not cutting it, you may look out for secondary hemorrhage, the coats of the artery generally being disorganized by the blow. But if the artery is cut, and surgical aid be not at hand, death will take place from excessive hemorrhage. But if a surgeon be at hand, let him cut down upon the artery and take it up, passing a ligature above and below the artery. When the circulation is impeded by a wound from a ball you must be careful not to force the circulation, the constitution being in a weak condition.

But maintain the equality of the parts, and the natural temperature as near as possible. In gun shot wounds of the thigh where amputation is resorted to. Instead of amputating, the limb, it is now the custom to suspend it in the Anterior Splint, which was customary to amputate, it was found nearly every case proved fatal, but by using this Splint, numerous cases are said upon good authority to have been cured, and the Splint is said to have accomplished a great deal, and won for itself much praise as well as success. This Splint was invented by our talented Surgeon Dr. J. R. Smith, and is acknowledged to be one of the greatest inventions ever transmitted to mankind. It possesses great advantages over any other invention ever used for the purpose. The limb is

suspended without pain, and inconvenience to the patient, in comparison with other inventions; the patient can move his position in bed without molesting the equilibrium of the limb, the limb by being suspended accommodating itself to the movements of the patient. The splint is more disgusting in fractures of the leg, but it has been found useful in many diseases of the leg where support and rest is necessary. I have seen this splint applied several times, both in fractures, and diseases of the leg; I have always heard satisfaction and ease expressed by the patient. The result of wounds inflicted by Cannon Balls, will be in accordance with the velocity of the Cannon ball, when moving with unspent velocity, if it strikes a member it will cut it off without

lacerating or tearing it, but when moving with great velocity, it would lacerate and shatter the part, and generally sloughing to a great extent will follow, and also a considerable amount of hemorrhage will take place especially if moving with great velocity; thus causing a dangerous and perhaps fatal wound, provided Surgical aid be not at hand. In a wound of this kind the patient receives a great shock communicated through the nervous system, consequently causing great depressing, and prostrating the powers of life. The patient is at once prostrated, his extremities are cold, then comes on irritation, followed by a great deal of inflammation, also considerable irritative fever. Such wounds are always attended with a great deal of danger, death being caused

either by hemorrhage, or the great shock to the nervous system. The treatment must be to support the flagging powers of life, and to promote reaction, which is accomplished by stimulants; but be careful not to establish reaction too rapidly or suddenly, as such a result would be likely to increase the danger and place the patient in still greater peril; but let reaction be established gradually; then proceed to treat it in the same manner as wounds of the same kind before mentioned. It will be necessary to amputate when a limb has been completely knocked off by a cannon ball, the stump must be amputated, and if the bones be splintered and shattered up to the next joint, or if the wound be so near the joint, that you apprehend and are fearful that mischief

will take place, the operation must be performed above. When the main artery, vein, or nerve is divided, it will be found necessary to amputate. But it is not necessary to amputate for considerable destruction of the soft parts provided the bone, vessels and nerves are not injured, and there is any chance for preserving the member without amputation. The limb should never be sacrificed, when there is any chance for saving it. It often happens that a cannon ball takes a man's leg off without causing death. A great deal has been said about persons being killed by the wind from cannon balls. But such injuries are now considered absurd by the best surgeons. But such injuries are generally produced by fragments of balls striking

the body and not lacerating the skin, the ball being first turned from its course by striking the bone, but producing fatal results within. The skin being harder than the organs within; the liver and spleen being very brittle and so forth, the fatal result is produced by injuring in all probability these structures. When a cannon ball strikes the head, neck, or chest, death generally takes place immediately, and medical treatment is generally of no avail. But when a limb has been mangled and lacerated it will generally be necessary to amputate the limb; but never amputate until reaction has taken place. Wounds from fragments of shells produce very ragged and mangled wound, more so than a musket ball. They are to be treated in the same manner as contused, and

lacerated wounds. You must use your own discretion as a Surgeon in saving the member if possible. But when you do find it necessary to amputate, you must first promote Constitutional reaction, after which treat the wound in the ordinary manner before laid down.

James. A. Brinkshank.
Louisiana.

A
Clinical Report of Cases
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 H. Jones
of
Maryland.
February 15th 1864.

Double Pneumonia.

Benjamin Deter, 1st corporal, a Kentucky cavalryman, U.S. Army General Hospital, Louisville, Kentucky. Admitted January 5th 1864. Suffering from an exceedingly severe attack of Double Pneumonia. He was perfectly broken down by exposure and long marches, was very feeble and somewhat emaciated. There was partial stupor, and I could obtain but little of the history of the case. There was marked dulness on percussion over both lungs on posterior surface, and slight dulness on anterior surface of right lung. The patient breathed with difficulty, and complained of a dull stinging pain in the right side. Pulse was quite feeble and much accelerated. The sputa was viscid and bright rather copious, and of a deep rust color, it finally became very scanty. (Incubitus

was mostly dorsal. This case was undoubtedly in the second or stage of Hepatization. Characterized by the following symptoms, sing dulness on percussion, bronchial respiration, pain on lower lobe. There was some cough and slight Delirium. Prognosis. The prognosis was exceedingly unfavorable. Treatment. January 31st the following was prescribed viz. ℞ Puniae Sulph. xxiv Grs. Ammoniae Carb. ℥ij. ℞ Liq Ammoniae Acet. ℥ij Tinct opii Camph ℥j Syp Simp ℥j M ℞ Acaciae ℥ii. Mist. Mist ℞ (see back of page for the rest) Milk was the sole diet, an other nutritious articles of diet were given. February 1st Treatment continued with Emp Cantharides 8x8 Applied between Anteriorly. Result Patient died February 2d 1864.

Autopsy four hours after death. On raising the breast-plate, we found a padding of lymph covering both lungs anteriorly, about seven inches in length, five in breadth and about ½ inch in thickness. The right lung was compressed towards the apex of the chest by the liver which was very large, weighed seven and ½ pounds. Both lungs were very much congested especially upon the posterior surface and some little adhesion of right lung posteriorly.
The posterior portion of the lungs would sink in water like lead. When an incision was made into the lungs, upon pressure a red fluid would issue.
No other Organs were examined.

Gunshot wound of Right Leg.

1. Gunshot wound of Right Leg, caused by a Minié ball – Private Eugene Selleve, aged 35 years belonging to the 8th Regiment Ohio Vols, received a Gun shot Wound of middle third of right leg by a conical leaden bullet, at the battle of Gettysburg the third day of July 1863. The ball entered the middle third posteriorly near the junction of the upper and middle thirds passed obliquely downward, inward and made its exit internally at the junction of the middle and lower thirds. The patient states there was considerable hemorrhage at the time the wound was inflicted, but soon ceased spontaneously, and that the shock to his constitution was slight he at first only experienced a sharp stinging pain in the right leg. He fell immediately on receiving the Wound, and about twenty minutes

after was struck in the upper third of right arm by a round leaden bullet, which was only a slight flesh wound. On being carried to the rear simple dressings were applied to the wounded leg and arm, he was then sent in an ambulance to the 3rd Army Corps Hospital. On his arrival at this Hospital, the wounds were sponged clean with cold water and dressed with dry lint secured by strips of adhesive plaster. The patient being much exhausted stimulants were administered and Dover's Powder at bed time. In the course of a few days there was considerable inflammation and some suppuration. The primary dressings were removed with cold water, and a flax-seed poultice was substituted. He was transferred to Wilson's Hospital, Baltimore City Md. during the 3rd. The bandages being too tight and transportation

over a very large road irritated the parts so deeply causing very active inflammation to supervene and threaten extensive sloughing. The discharge had now become very copious, of a cream like consistence tinged with green, and of a very offensive smell. - Treatment. The wounds were syringed out twice a day, with one part Liq Chlor. Sodae to five of Water, and cold water dressings were applied locally. Constitutional treatment was mildly antiphlogistic, and an opiate at night. He was transferred to Camden Street Hospital November 13th 1863 and was quite convalescent able to walk with a crutch. Treatment while at this Hospital consisted of dry lint secured by strips of adhesive plaster and simple serate locally, with laxatives and full diet. Result. There was slight anchylosis of the Ankle joint, and

the foot was turned a little inward, so as to rest on the outer margin. The wounds have healed finely, and the Patient was discharged from the United States Service the first day of February 1864.

Rubeola

Private Elijah Hobbs, aged 23 years, by occupation a farmer belonging to Company B 1st Regiment Eastern Shore Maryland Vols. of dark complexion, black hair, dark eyes: temperate habits except excessive use of Tobacco; came into the Army General Hospital Camden Street January 25th 1864

The patient was exceedingly feeble and much emaciated by long continued service

He states that he has been quite well for six or eight days. The introducing fever was very slight, characterized by lassitude and shiverings which was soon followed by slight fever with acceleration of pulse great thirst and slight loss of appetite. The fever which preceded the eruption was attended with slight inflammation of the mucous membranes of the air passages. The eyes were vascular and watery the eyelids burning and quite red. There was a copious

flow from the nostrils, considerable sneezing and a dry hoarse cough. There was slight vomiting which ceased upon the appearance of the eruption. The fever was much increased on the appearance of the eruption. The eruption made its appearance on the fifth day, which consisted of minute papulae, they gradually increased and ran into blotches which were of a crescentic shape. The eruption was several days coming out, it began on the face, neck, & shoulders, then gradually reached the body and lower extremities. It disappeared in the same order, after having remained three or four days on the face, it began to disappear & left the eruption on the surface of the skin, and more especially upon the face, as it was somewhat swollen. The cuticle crumbled off in fine scales,

which resulted at a bran. Prognosis.—
The Prognosis in this case was very favorable
as the general symptoms were not severe.
Treatment.— The Antiphlogistic regimen was
adopted, An aperient every second or third day
to secure a proper state of the bowels. Some
diaphoretic medicines were also prescribed viz.
Liquor Ammoniae Acetatis ℥iv Spiritus Aetheris
Nitrici ℥ss Aquae Camphoraе ℥j was given
three times a day. As the patient was weak
and emaciated, milk punch, beef tea, Chicken
broth, and other nutritious articles of diet were
given. February 11th patient improving quite
rapidly, and slightly convalescent. 14th feels quite
well and considers himself perfectly recovered.
Result. Patient cured February 15th 1864.

Gonorrhoea

Private William Inks, aged 18 years was admitted into the venereal ward the twenty ninth of July 1863. He was in good health and of sound constitution. He states that he had a coitus the twenty fifth of July, at which time he contracted the the disease. The first symptoms made their — appearance on the twenty ninth, which was very slight, consisted only of a tickling sensation at the orifice of the canal, which on examination was more red than natural, and was moistened with colorless and viscid fluid. This fluid gradually increased, until by present after days; pain then appeared at the orifice of the urethra. This case was in the first stage and the following treatment was adopted, which consisted of an injection of Argent nitrate xx gr. to ounce aq. ℥j. The patient was directed to pass his water, before using the injection. The

duration of this stage was about four days. The Catholic treatment was unsuccessful, and the symptoms were greatly aggravated, increased in intensity, and in a few days the second or inflammatory stage was ushered in, which was characterized by the membrane covering the glans penis being much reddened and the whole extremity of the organ was much swollen, very sensitive and painful. The Discharge had now become very copious, of a yellowish color & tinged with blood. The urine was very sensitive and irritating, passing and especially upon the under surface over the course of the urethra. The patient complained of intense pain while passing his water and in his own expressive language compared it to the sensation of a hot iron introduced within the canal. He was much troubled with nocturnal erections, which

came on after he was warm in bed. He was easily excited by lascivious dreams and warm contact of the bed clothes. He was much troubled with painful chordee. Treatment. The nocturnal erections and chordee were relieved by iced water, Mercurial ointment with extract of Belladonna locally, and Camphor & Opium at night internally. This stage continued about three weeks, thereupon the third or stage of decline was ushered in, which was marked by no peculiar symptoms, and was characterized by the disappearance of the more acute symptoms, and a gradual return to a condition of health. The discharge came through the same appearances in an inverse way, which it did at the beginning of the attack. The most valuable sign of the ushering in of this stage was the diminution or entire cessation

of pain in making water. The urethra and chordee continued some time after the acute inflammation had subsided. Treatment during the stage of decline consisted of saline purgatives, Cubebs, copaiba and moderately antiphlogistic remedies; Weak injections of sulphate of zinc were used three times a day.

Result. Patient cured October 4th 1863

Compound Gunshot Fracture of Right Femur

Compound Gunshot fracture of right femur caused by a conical headed bullet - Private John Hochstein aged 31 Years, belonging to Co. A 40 Regt. New York Vols. received a compound Gunshot fracture of middle third of right femur by a minie Ball, at the Battle of Gettysburg second day of July 1863. The Ball entered the middle third anteriorly passed obliquely downward inward shattering the bone completely and made its exit internally about four inches above the knee joint. The patient states that hemorrhage was very profuse on the receipt of the injury, which he arrested by tying his handkerchief - around the limb, and that he was on the field three days and nights amidst the dead and dying, and received but little —

attention. On the fourth day he was carried to the rear, his wound was sponged clean with cold water, and simple dressings applied & secured by bandages. He was then sent in an Ambulance to the 3rd Army Corps Hospital. A few days after his arrival at that Hospital the limb became very Oedematous in consequence of having been conveyed over very rough roads, — and extensive sloughing was finally the result. Ten days after the Wound was inflicted a slight hemorrhage came on which was arrested by pulverized persulphate of Iron & cold, position and pressure. The discharge has now become very copious, exceedingly offensive, of a yellowish color tinged with green. — Treatment. The Wound was sponged out thoroughly two or three times a day, with a

strong solution of Liq. Chlor Sodae, cold water dressing, and flax seed poultice. The antiphlogistic regimen was adopted with an opiate at night. He came into Camden Street Hospital November 10th 1863. He was very feeble, and much emaciated. The wound had rather a healthy appearance, very little discharge. On examination the limb was much inverted inward, with a prominence on anterior surface, which was the lower fragment. Not up over superior, causing the limb to be four inches shorter than its fellow. This case has undoubtedly been badly treated. The patient states no splints were applied. In our opinion, if Dr Smith's Anderson splints had been applied, the patient would have had a useful limb. An abscess formed posteriorly, which was opened January 15th when

a pint of pus at least issued. A flax seed poultice was then applied. Stimulants and 10 Gr Dovers Powder at night. Mild laxatives every few days to secure a proper state of the bowels, Milk Punch, beef tea, Chicken soup, and other nutritious articles of diet were given. February 8th the patient improving rapidly and wants to sit out of bed — 10th No change of treatment. 13th Still improving Simple Cerbal Scalp — Patient still under treatment.

Pleuro-Pneumonia.

Private Michael Sikes, aged 31 years belonging to Company D. 54th Regiment Iowa Vols came into the Emory General Hospital Camden Street Baltimore on 11th October 31st 1863 suffering from a severe attack of Pleuro Pneumonia. The patient was exceedingly feeble and much emaciated by exposure and long continued service. The patient was much depressed, breathed with difficulty. There was considerable dulness over the posterior surface of left lung, and throughout its lower lobe. Decubitus was mostly on left side. He complained of intense pain in left side, which increased when he moved about in bed. There was some lobular respiration mingled with large moist râles. Considerable thrill sensible by applying the stethoscope over the anterior surface of the lower lobe of the right lung. Diagnosis

Pneumonia of left lung. Pleuritis of right Pleura, probably of some standing. Treatment Oct 30th. the following was prescribed viz ℞ Quiniae Sulph. ʒß Ammoniae Carb ʒij Pulv Scillae xii Grs iiij. Pulv (12 ℈ One every three hours. Whiskey ℥viii Dose. four table spoonsful every three hours 31st Treatment continued. Dovers Powder x grs. at bed time. Diet. Milk, Beef essence Chicken broth Nov 1st Patient states he feels better talks with a firmer voice. He spat a small quantity of tenacious mucus, tinged with blood. 2nd Treatment continued with Ung. Cantharides 6 X 4 inches to the left side posteriorly under scapula. 3d Coughs less, complained of no pain states he feels quite comfortable. 4th Treatment same. Blister raised well, and discharged freely. Patient disposed to get out of bed,

and he was better and wanted his clothes.
Regarded as a very bad symptom - visage -
observed to be slightly mottled. Pulse very
feeble, supporting treatment with stimulants
and generous diet continued - Result
Patient died November 5th 1863.

Inspection cadaveris twenty hours after death.
On raising the breast-plate a quantity of
turbid serum mixed with pus and flakes
of lymph escaped from the right thoracic cavity
the right lung was found much compressed
towards the vertebral angle of the Ribs by
a large accumulation of this fluid amounting
by estimate to half a gallon in quantity
Over the anterior surface of the left lung was
spread a thick padding of lemon colored lymph,
some six inches in length, three inches in breadth.

and ½ inch in thickness. The left pleuritic cavity contained about a pint of pale yellow serum. The left lung was found much congested throughout its posterior surface and lower lobe, and softened in texture. The right lung was darker than natural thoroughly collapsed, and on being cut into, the terminal Bronchi were found loaded with a frothy reddish mucus. Both lungs were found adherent to the walls of the chest, at various points over the posterior surface. Other Organs were not examined.

A

Inaugural Dissertation

on

the Asphyxia Neo-natorum:

submitted to the examination of

the Board of Trustees

of the

University of Maryland

for the Degree of M. D.

by

Leonard D. Larrison.

of

Baltimore,

Md.

February, 1874.

[illegible]

-ned the nerve of organic life. It has [illegible]

[illegible], and second, [illegible]

[illegible] communications [illegible]

[illegible]

ascending, to commu-

[illegible] or [illegible] [illegible] the [illegible],
[illegible] discovered in 1828.
The [illegible] which is [illegible] is small,
[illegible] and flattened, situ-
ated [illegible] between the [illegible]
[illegible] and the [illegible] rectus
[illegible] embedded in [illegible]
tissue. Its branches of distribution
are known as the ciliary nerves; they
accompanying the ciliary arteries [illegible]
[illegible] choroid, and divide into fi-
laments which first form a [illegible]
[illegible], pierce the sclerotica and fi-
nally terminate in the iris. [illegible]
[illegible] by these branches. [illegible]
[illegible]
the nasal branch of the ophthalmic

[illegible] from the [illegible];
a short and thick branch, the short
root, from the inferior division of the
motor oculi to the [illegible];
and a long slender filament, the sym-
pathetic root, from the carotid plexus
which forms the continuation of the
sympathetic system from below.
Ganglia of division of the great sym-
pathetic in the head, the spheno-
palatine or Meckel's ganglion, situa-
ted in the spheno-maxillary fossa,
as the termination of the [illegible].
It is of small size and [illegible]
shape. It has four branches. [illegible]
communicating branches are distributed [illegible]
the periosteum of the orbit. [illegible]-

2. The internal branches are

it peals against the

its connection with the [illegible] [illegible] median. The branches of this ganglion are [illegible]; those of distribution, and those of communication. Its branches of distribution are to the tensor-tympani and tensor-palati muscles. The branches of communication are with the inferior [illegible] and auriculo-temporal branches. The roots of the [illegible] gan- [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] with the [illegible] [illegible] palatine [illegible] of the [illegible] [illegible] muscle. Its branches of distribution

[illegible]

[illegible] The [illegible] and [illegible] the
[illegible] communication [illegible]
with the cranial [illegible]. It com-
municates with most of the cerebral
nerves and distributes branches to
which [illegible] the [illegible]
[illegible] and [illegible] [illegible]
tions. It has communications with
the third, seventh, pneumogastric,
sympathetic, the ophthalmic division
of the fifth, with the superior cervical
ganglion and with the inferior maxillary
ganglion. To the fifth pair it distributes
branches directly; it also communi-
cates with the facial, auditory and
glosso-pharyngeal. Connecting the
cranial [illegible] [illegible]

found beside. They are three in number, superior, middle and inferior. The superior is long, fusiform, of considerable thickness and of a reddish gray color; it extends from within an inch of the carotid foramen in the petrous bone to opposite the lower border of the third cervical vertebra. The middle cervical is usually small and sometimes wanting; it is situated opposite the fifth cervical vertebra and rests upon the inferior thyroid artery. The inferior cervical ganglion is much greater in size than the preceding and is irregularly shaped. It is semilunar in form and situated near the base of the transverse process of the 7th cervical vertebra,

immediately behind the vertebral column; hence its designation vertebral ganglion. The [illegible] ganglia used are three on each side, the branchial, [illegible] and [illegible]. The [illegible] order are the [illegible] ganglia, [illegible] in number, [illegible] on each side; they are [illegible] and [illegible]; they are situated on the heads of the ribs and covered by the [illegible] costalis; the first two and the last [illegible] are [illegible] the hands. From these are formed the greater and lesser [illegible] nerves, or splanchnics, from which are [illegible] derived the phrenic, gastric, hepatic, splenic, superior mesenteric,

[illegible] [illegible] and [illegible]
[illegible] mesenteric plexuses.
The lumbar ganglia are four or five in
number on each side; their position
is on the vertebral column close to the
anterior border of the psoas magnus
muscle. The [illegible] [illegible]
[illegible] from these ganglia.
The [illegible] of the sacral ganglia, of
which there are four or five on each
side; they are situated on the anterior
[illegible] the anterior sacral foramina [illegible] c.
[illegible] of the ganglion im-
par which serves to unite the two ex-
tremities of the two sympathetic
trunks. Such are the [illegible]
[illegible]. [illegible]

but [illegible] connected [illegible] and nerves called sympathetic.

A description of the anatomical relations and the distribution of the principal trunks and branches of the sympathetic nerve [illegible] [illegible] [illegible] this [illegible] [illegible] [illegible] of the [illegible] of the [illegible] [illegible] but [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

and those of the ancients.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] system. Notwithstand-

[illegible]

[illegible]

[illegible]

into its [illegible] of [illegible].

The nervous system, which [illegible] the sensibilities [illegible], but [illegible] its [illegible] [illegible] endowed with sensibility and the power of exciting motion, but to a less extent than in the cerebro-spinal system. If for example, we irritate a solar plexus, or one of the [illegible] is, the evidences of pain [illegible] [illegible] and [illegible]. On the other hand, [illegible] we find evidences of sensibility in the sympathetic ganglia distinctly manifested, but under less control and only after [illegible] application of the irritating [illegible].

[illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] the sympathetic system. [illegible] [illegible] of the [illegible] [illegible] [illegible] [illegible] [illegible] of the spinal cord, and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] with the cord. Some phenomena [illegible] concerning the sympathetic relates to the changes produced by its division; [illegible] the most [illegible] of these changes is a very [illegible] the elevation of temperature in the affected parts. The sympathetic [illegible] the functions of the viscera [illegible]; these take place at the [illegible] and in the [illegible] succession [illegible]

of the sympathetic which exists between the stomach and the brain. The sympathetic is a medium through which mental and moral influences affect the body; in short, it is the agent of the spirit, the medium of power. It is connected with the ganglionic particles of the cerebrum, distributing the nervous energy, the electro-galvanic, or vital fluid, to the various organs, tissues, and functions of the body, and receiving back, into its cerebral centres, the vitalized and refined fluid, after its work is accomplished; so also a superabundance of action is caused by the mental state of the gastric juice, or fluid

exercised a good influence both as

[illegible]

[illegible] actions, but they af-

[illegible]

[illegible] does no bungling work.

[illegible]

[illegible] and beauties of [illegible]

[illegible] the varied wants

[illegible]

Gerard B. Tonson

[illegible]

A Report of Six Cases

Respectfully Submitted
to the examination
of the
Provost Regents and
Faculty of Physic
of the
University of Maryland —
For the degree
of Doctor in Medicine
by
Julius D. Stearns
of
Maryland —
Session 56th 1863-4

Hemiplegia

Isaac Colgan, Sailor, age 20, entered the Baltimore Infirmary, August 26, 1863, having a wound about four inches long on the left side of his head near the sagittal suture. His right arm and leg were paralyzed. From his account of the injury it appears that on the evening previous about 8 o'clock of Schooner "George Washington" a negro man, one of the crew of said vessel, struck him on the head with a billet of wood, knocking him prostrate on the deck; he lay there, over an hour insensible.

On recovering consciousness, he was unable to move his right arm or leg, having some power in the flexor muscles of his forearm. His wound was closed with some adhesive plaster. The next evening he was sent to

the Baltimore Infirmary, where he now lies. The right leg and arm being paralyzed and the injury situated on the opposite or left side of the head, which is characteristic of hemiplegia; evidently convinces me that there must have been some effusion on that side of the brain; producing pressure. The muscles of the eyes face or tongue were not affected. He did not vomit after receiving the injury. His appetite is and had been good. When the wound was examined by Dr. Wattler, no fracture could be detected. His condition good. But although from present appearances his prognosis is favorable, he is not yet out of danger; for, such injuries are often followed by Men-

-ingitis and such might yet be his fate. Very slight causes, are apt to bring on inflammation of the brain in such cases as his. These injuries are known to be followed by abscess of the liver, the reason why such abscess occurs is not known. August 21. He can move his fore arm and fingers of the affected arm, his leg remains paralyzed. The sensibility of leg and arm good, there is only loss of power. Cold water dressings are being applied to the wound as directed by Dr Butler.

22. On awaking in the morning he could move his arm of which there is great impairment of power, nevertheless he has considerable motion; pulse slow and

weak, wound healing rapidly. Continuing the cold water dressings. He say his paralyzed leg feels as if it were asleep. From present appearances his prognosis is very favorable. 23." He can move about the room having to swing or drag the paralyzed leg, which hangs by the other leg when he is in the erect posture as if it were dead. His pulse to day very slow and weak only about forty eight to the minute.

24"; Pressure near the wound, causes pain. Bowels regular. Appetite good. Pulse seventy somewhat intermittent.

25." Improving. He can grasp with the paralyzed hand, but does not exert much power; he has more power when grasping

a large object, say three or four inches thick, than small ones an inch or two in thickness. to improvement of the paralyzed leg. 26 Improving. He has more power in the flexor muscles of the forearm, than he had yesterday. Appetite good; bowels regular. Moves about the room with difficulty. Dr Butler ordered the Iodide Potassae to be given in five grain doses three times daily. The Iodide Potassae is the sovereign absorbent and alterative. Pulse decreased in number is only about fifty in the minute. 29th. His strength improving daily, he has slight control over the flexor muscles of the thigh of paralyzed leg. when sitting he can raise his leg.

from the floor without assisting with his hands. 28". He says his right side (which is the paralyzed side) feels much better, his paralyzed leg getting stronger. moves about the room with more ease; He can grasp with more power than he could heretofore with his paralyzed hand. Bowels regular. Pulse about sixty two, improving. Dr. Butler ordered a blister to be applied back of his neck, which I did. The blister drew very well. 29. He can support himself on the paralyzed leg. Walks about the passage with more ease. Continuing with the Iodide Potassae. 31." Can wear a boot on his paralyzed foot. Sept 1". Much better, walked out.

Sept. 3, He can now grasp firmly with the paralyzed hand. 7; Can walk very well, only a slight limp being perceptible. He has considerable power in his right arm and hand though not as much as he has in left or unaffected hand.

9. Has some power in his ankle joint of the affected leg. Rapidly gaining strength in his paralyzed leg. Walks considerable distances daily! 11, Had a chill followed by fever. No pain over the Kidney. Violent headache. Somewhat constipated. 13; No return of chill.

On yesterday he moved more his toes, thus showing the gradual return of motion downwards. 16; He says the lower part of his paralyzed leg feels somewhat

numbed 6th. Sensibility remains good. Continues to improve. 17; Left, having almost entirely recovered, Has returned to his former occupation.

Purulent Gonorrheal Ophthalmia

P. P. age 20; entered the Baltimore Infirmary August 24, laboring under a severe attack of Purulent Gonorrheal Ophthalmia. His left eye was much swollen, inflammed, and discharging a thick purulent matter. His right eye somewhat inflammed and showing signs of commencing disease. He was suffering intense pain, restless and uneasy; some constitutional disturbance, his urethra discharging matter similar

to that from his left eye.

It appears, that on the 9th of this month, he had sexual intercourse with a female, which was followed, on the 16, by the first appearance of Gonorrhea.

On the evening of the 21st, the left eye began to water [illegible] which was the first appearance of the Ophthalmia. Purulent Ophthalmia being rare, and the discharge from his urethra preceding the discharge from the eyes, seems to be a strong proof in favor of the argument; that, "matter taken from a patient' urethra, having Gonorrhea, if brought in contact with the eye, will produce the same a discharge similar or identical to the Gonorrhœal discharge".

Some persons think, that the disease cannot be produced by the matter from the patient's own urethra, but only from another person's urethra; "A Dr Beck" in Stratton's Practice of Physic," says, he had known a hospital assistant who, "with more faith than prudence" conveyed the matter of Gonorrhœa from his urethra to his eyes with impunity. He states also the converse experiment; a soldier in a very advanced stage of Egyptian Ophthalmia, attempted to divert the disease from his eyes by applying some of the matter thus [illegible] to the orifice of his urethra; no effect followed this trial. But in another case the matter taken from the eye of one

man laboring under purulent ophthalmia, was applied to the urethra of another man; and inflammation commenced there in thirty six hours, and he had a very severe attack of gonorrhea."

To show that the disease can be produced by matter from a patients own urethra, I will again refer to Dr Watson's Practice of Physic, to a case furnished by Dr Mackenzie. It is one of the neatest and most conclusive instance of the production of the disease in this way. "A patient was brought to him from the country, with his left eye violently inflamed and chemosed and discharging a large quantity of purulent fluid; the lower lid everted, and the cornea totally opaque."

"Thirteen days before, this man, who had then a profuse gonorrhea, but whose eyes were perfectly well, while stooping down and shaking away the discharge from his penis, flung a drop of it fairly into his left eye. Violent inflammation immediately set in, was confined to the eye that was thus inoculated and produced the results I have mentioned; the gonorrhea going on just as before."

Returning to my case, P.P. There are many ways in which he accidentally might have applied the gonorrheal matter from his urethra to his eyes.

He had been leached before entering this Institution. Dr Butler, the attending Surgeon,

examined him on the day of his admittance and prescribed the following; which was collected by the Clerk in charge of that Ward;

℞ Hydrarg. Submur. gr viij } as a quick
Diaphor. Pulv. gr x } purge.

Mix. & ft. pulv. j. S. at once.

To be followed by a Seidlitz powder.

℞ Argenti Nitras gr vi.
Aquae ℥ j

Mix. & ft. collyrium. S. To be dropped into the left eye.

℞ Argenti Nitras gr iij
Aquae ℥ j

Mix. & ft. collyrium. S. To be dropped into the right eye.

℞ Hydrarg. Oxidi Rubrum ʒ ij
Cerat. Simplex ℥ j

Mix. & ft. unguent. S. To anoint the eyes at night.

He also directed the watery solution of Opium to be kept constantly applied to the eyes: blisters to be applied to the temples, and the feet to be injected with water. August 25. The right eye inflammed and discharging purulent matter also. Constitutional disturbance much more marked. 26. His eyes continue discharging profusely, the inflammation considerably subdued. Dr Butler directed the six grain solution of Nitrate Silver to be changed to two grains, he also put him on constitutional treatment as follows;

℞. Hydrarg. Submur. gr ij
Pulv. Opicae gr ¼
Pulv. Capii gr ¼
Mp. Oft. pill. j. S. To be given three times daily until the effects of the Mercury are made

evident by some of its usual symptoms, as tender gums, mercurial breath.
The left eye of patient looking badly, the conjunctiva considerably effused; this effusion gives the cornea the appearance of being sunken in.
August 27th; The effusion of the left eye distending the conjunctiva to such an extent, that Dr Butler scarified it and let out the effused fluid, which afforded the patient considerable relief.
He has some fever. Bowels regular.
28, Dr Butler, thinks the left eye sad recovery. He syringed both eyes with water. The cornea of right eye looked hazy, the discharge diminishing. has some constitutional disturbance.

29. Slight improvement. Continuing with the same treatment. 31, His gums becoming tender from the Mercury, that drug was accordingly discontinued. The inflammation considerably subdued, his eyes continue to discharge but not so profusely. After the Mercury was discontinued, Dr Butler directed the following.

℞ Vin Colchici ℥tt XX
Iodide Potassae ℈ V
Aquae ℥ S.
Mix. & ft. Sol. S. To be given three times a day. Sept 1st, Dr Butler changed the two grain Nitrate Silver solution to one. The discharge from his urethra diminishing. His general health somewhat impaired. Pulse full and strong. Appetite tolerably good. No improvement of his eyes.

Sept. 5, He says he feels very well with the exception of his eyes. When examined they are found to contain the loose membranes that cover the anterior parts of the eye. These loose membranes are so congested as to give to the cornea, as I mentioned before, the appearance of being sunken in. Continuing with the same treatment. 11th, His eyes continue to discharge matter. When they have been washed or syringed, and the lids raised, he can distinguish light. 13th, The discharge from his urethra has ceased. 14th, Dr Butler discontinued the two grains solution of Nitrate Silver and directed two grains Sulph. Copper to the ounce of water instead, to be dropped once a day into the eyes. 17. He can

distinguish day from night, when the cornea is brought in view, but he can distinguish no object. The Vin Colchicum, acting as a diuretic, medicates his urine, and thus produces a beneficial effect, on the urethral discharge, at the same time that it is exerting its alterative effects upon his system. 19th The cornea of his left eye does not appear so far in, thus showing that the chemosis of the conjunctival vessels has diminished. The discharge from his eyes not so profuse. He has slight pain when passing his water, thus showing a trace of the disease in his urethra. 23, His eyes better, the Sulph. Copper, exerts a beneficial effect upon the discharge. Improving in strength.

Sept. 25th; Vision better, the discharge from his urethra has recommenced. October 2nd; The discharge from his eyes diminishing. 3rd; Urethral discharge continues, but the discharge from his eyes has ceased. 5th, Dr Buller directed as an injection to urethra the following;

℞ Zinci Sulph. gr IV
Aquae ℥j

Mix. & ft. injection. S. a syringe full, to be injected into his urethra two or three times a day. 10th; Vision improved, the right eye well, than left one. His general health very good. 11th; The urethral discharge has again ceased. 14th; The iris of his right eye has rounded slightly, it has the appearance of a

small dark spot elevated. This constitutes providentia iris. 19th: No change. 20th: Some discharge from urethra. 20th: No improvement, some chemosis of the conjunctival vessels of his left eye. He can distinguish no object, though he can perceive when an object is moved between him and the light. His general health quite good, the discharge from his urethra has again ceased. Continuing with the same treatment. To-day he left us having only a very limited amount of vision, as I have already shown in this report.

Syphilitic Iritis

S. C. age 51, entered the Baltimore Infirmary, Sept 18th, laboring under the following symptoms. The iris of left eye adhered to the cornea by a small patch of lymph situated near the top of the iris somewhat inward which is not usual, for the lymph generally gravitates toward the bottom of the anterior chamber of the eye. The outer edge of the iris which is attached to the ciliary ligament, discolored, being of a hazy or light bluish gray color, The iris immoveable and drawn somewhat downwards and towards the inner canthus of the eye: it therefore necessarily follows that the iris is attached to the cornea by a patch of lymph. These symptoms constitute Iritis. The mucous

membrane covering the anterior part of the eye. (or technically the conjunctiva) much congested, its vessels presenting a tangled or net work appearance, thus constituting conjunctivitis. The sclerotic vessels are also somewhat congested, the vessels instead of presenting a net work appearance, are more regular and straight in their course, thus constituting sclerotitis. He can distinguish light with the affected eye but no object.

This man about two years ago, contracted syphilis which was not followed by a bubo. He said he took mercury and that his right eye had been affected, that eye is in a good condition at present. He complains of rheu-

-matic pains in his hands and feet. Pulse tolerable good. Appetite poor. Bowels regular. His pains are not confined to any particular part, but are of a wandering or migratory character. They do not occur regularly at night, like the nocturnal pains of secondary syphilis. Dr Butler having examined him, put him on the following treatment;

℞ Mass. Hydrarg. Gr xij
Opii Pulv. Gr ¾

M. & ft pill iij. S. one to be given three times daily. The mercury by its absorbent power to carry off the lymph. The Opium to prevent the mercury passing off too rapidly by the bowels. He also directed a blister to be ap-

-plied to the left temple; this to act as a counter irritant. Used also an ointment as follows;

℞

Ungt. Stramo. ℥ij
Ext. Belladonna ℥ß

My. Dft. Unguent. S. To be applied over the brow at night. The Belladonna having a tendency to dilate the pupil, it might in that way assist to break up the attachment of the iris with the cornea. The watery solution of opium was directed as a wash to the eye.

19th, To day he is somewhat better. Bowels slightly costive, the opium contained in the blue mass pill will tend to produce this effect.

When the mercury begins to affect his system, as shown by tender gums or a mercurial breath; the pales of iris should disappear and the iris should be thus rendered moveable again.
20th; Improving. He says there appears as if a great number of insects were flying before his affected eye.
21st; His breath presenting a mercurial odor, thus, showing that the drug is exerting its effects upon his system. Dr Butler, accordingly directed the ir. gr xiii of blue mass to be given once a day instead of three times. He also directed, the blister to be renewed on the left temple and to continue with the water solution of opium, as a wash.

The ointment of Stramonium and Belladonna to be discontinued.

23, The patch of lymph has nearly disappeared. The iris is more of its natural color. He is improving in strength. His gums becoming tender, the mercurial pills have been discontinued. His bowels open. Rests well at night. Vision of affected eye improved.

24, The iris remains immoveable, but is much clearer. Dr Butler to-day directed the following;

℞ Iodide Potassa ℥ V
Vin Colchici ℥ XXV
Aquae ℥ S.

M. Oft. Sal. S. To be taken three times a day. The Iodide Potassa to act as an absorbent and the Vin

Colchicum as an alterative. 29.- The iris remains immoveable although it has a decidedly clearer color than when he entered this institution. Dr Butler directed the Ext. Belladonna to be applied above and below the eye. The Belladonna having the power of dilating the pupil or inactive by contracting the iris, should by thus causing the iris to contract break up the adhesions between it and the cornea and thus exhert a beneficial influence. The iris being once separated from the cornea should contract [illegible] the pupil (unless adhesions have taken place in its substance) whenever acted on by light. The vessels of the eye commenced

congested. 28, Dr Butler directed a blister to be applied to the left temple. Vision of the affected eye has been slightly improved. Dr Butler says he does not expect much benefit from the Belladonna while there is inflammation. The iris remains immoveable. To-day there were ordered,

℞. Cupri. Sulph. Gr ij.
Aquae ℥ j
M. & ft. collyrium. S. To be dropped ℈ j into the eye once a day.

30, The patch of lympt. has been absorbed from between the iris and cornea but the iris remains immoveable, Adhesions must have taken place in the substance of the iris. thus preventing it from dilating or contracting the pupil

when acted on by light. The congestion of the vessels of the affected eye diminishing. His general health quite good.

October 6th. The inner border of the iris discolored. The iris does not contract when the lids are suddenly opened. The sclerotic much clearer in consequence of the diminished congestion of the vessels coming it. A small patch of lymph is now situated in front of the pupil or rather somewhat inward toward the inner canthus of the eye. The transverse diameter of the pupil is greater than the perpendicular, giving it the appearance of the pupil of a Cat's eye. His vision improved. He can count fingers when held between the affected eye

and the light. He can also distin-
-guish some colors. His general health
much improved. Appetite good.
9. He left us much relieved.

Partial Castration

J. H. M. age 22, entered the Baltimore
Infirmary, Sept. 24th; having the follo
-wing history: 'About two weeks previ-
-ous to entering this Institution he had
pain in his right testicle which extend
ed towards his loins. His right testicle
was much enlarged. He said it gra-
-dually had increased in size from boy
-hood. Said he never had syphilis or
gonorrhoea. Is an unmarried man.'

never having received a blow or other injury. This latter in conjunction with other circumstances justifies the supposition that the affection was congenital.
Dr Milhallard - (the Resident Physician) examined him and found the right testicle to be hard and enlarged.
He directed the following,
℞. Unguent. Stramo. ℥ß
Extr. Belladonna. ℥ß
M℞. & ft. Unguent. S. This to be applied externally on scrotum to relieve pain until something more was done.
He also put him on Iodide Potassium to be given in five grain doses three times a day. This remedy was given for its absorbent power.
Sept. 25, Dr Butler on examining

him found considerable induration and
lung and pain; expressed his opinion
that permanent relief could only be
afforded by the extirpation of the testic
-le; to which, the man gave his consent.
On the 26th, the time having arrived
for the operation; the man was brou
-ght into the Theatre or Picture Room where
it was to be performed. The man
having been put under the influence of
Chloroform, Dr Butler (after first shavi
-ng the hair near the Scrotum) began
by making a longitudinal incision
from near the external abdominal ring
toward the inferior extremity of the scro
-tum. The tumor was then separated
from its attachments to the scrotum

A ligature was put around the cord to prevent it retracting when cut. Dr Mulholland grasped the cord, which was divided by Dr Butler, cutting it transversely. When divided it retracted with so much force as to require the use of a pair of forceps to prevent its cut extremity from being drawn within the abdomen. Dr Butler then with the tenaculum hooked up the Spermatic artery which Dr Mulholland ligated. The nerve being separated from the artery thus preventing much pain which undoubtedly must occur if the nerve were ligated with the artery. Three other arteries were also ligated. Torsion was applied to other small ones.

The loss of blood was small. The parts being well sponged, two sutures were sufficient to hold them together, after which the scrotum was bandaged.
He was permitted to lie on the table a short time before being removed.
The tumor which had been removed was then examined. It was quite hard and supposed to be fibrous; but on further examination was found to contain fluid of a thickened consistance and darkened color. The testicle had been completely absorbed and nothing remained but the hard walls of the cyst; which was of a fibro-cartilaginous consistance. The man is doing very well. 27. He does not suffer much pain.

Sept 28th, The glands of his left groin somewhat hardened. Causes him pain to raise his leg. Fluctuable pus forming in the scrotum. He is getting on as well as might be expected. His bowels have been moved. 30. Scrotum swollen and discharging healthy pus. His condition very good. October 2nd. Improving. 3rd Dr Butler removed one ligature, and on the 4th another leaving two. 6th, The swelling of scrotum diminished. Dressing the part with simple cerate. To day he is much better. 10th, Gradually improving. The scrotum diminishing in size, its discharge lessening. One ligature yet remains, considerable bone having been exfoliated without separa-

-ling it from the artery. There is slight tenderness and swelling over the situation of the divided cord.
14th, Improving. To day Dr Butler exerted considerable traction upon the remaining ligature without effecting its separation. His general health very good. 15th, Dr Butler gave direction to the Student attending that ward, to wrap the ligature around a bougie and then tighten it by rotating the bougie, thus making gradual traction upon it. 19th, To day the ligature was drawn away by Mr Robertson (the Student in charge of that wards). The gradual traction kept up by the bougie assisted in detaching the ligature.

22nd Sept. The incision made in the scrotum healed; he having entirely recovered from the operation: Forming a very interesting and successful case.

Post Mortem

At a post mortem held by my Preceptor, Dr S. W. Butler, who kindly invited me to attend; such important pathological lesions were found that I determined to make a report of them. It appears the deceased had on the Monday previous been attacked and severely kicked on the the abdomen, and such lesions produced as to cause his death.

Immediately after receiving the injury

deceased was noticed to have his hands over his abdomen, complained of great pain, went to the water closet; returned from water closet with his hands again on his abdomen. Dr Hoffman was sent for, not being home, Dr Larkin was called in, who cupped him on the abdomen and gave a cathartic. Next day, (Tuesday); Dr Hoffman was called to see him. he administered a cathartic which failed to produce an evacuation. Dr Hoffman said he had a flat pulse which would not have admitted of blood letting. He ordered an enemeta and put him on the following. ℞ Hydrarg. Submur. grij Opii Pulv. gr ¾ M.f. ft. pulv. i. S. To be taken every two hours.

Dr Hoffman wished to mercurialize him, thus hoping to allay inflammation by the absorbent power of that drug. The man suffered intense pain. Dr Butler was called to see him by request of Dr Hoffman. After examining the man he suggested to Dr Hoffman that a blister might be applied to the patients abdomen, which was done. The disease had advanced too far for the agent to produce much good effect.....

The man died evidently from the injuries received having produced peritonitis. On Saturday two of my fellow students (Mess. Richardson and Monmouth) and myself, accompanied

Dr Butler to the deceased house.
After waiting there a short time
Dr Hoffman arrived. The examinati-
-on was then proceeded with as follo-
ws. Dr Butler began by making a lon-
-gitudinal incision from the Ensiform cartilage
to the Symphysis Pubis, then one from
the Superior Spinous processes of the
Ilium on either side to the Umbilicus.
After the abdomen was thus opened,
we found unmistakable signs of peri-
-tonitis. The Intestines were agglutinated
together at different points by patches
of false membrane. and wherever this
occurred there we found pus in abundan-
-ce. In the lower portion of the ab-
dominal cavity we found at least two

quarts of a dark colored fluid, having all the appearance of incipient feces. On examining the intestines carefully to detect the source of this fluid we found about midway in the course of the Ileum a rupture of the intestine from which the fluid had escaped into the cavity of the abdomen. The small intestines were constricted in several places from the contraction of its muscular coat. The Spleen, Kidneys, and Liver, were healthy, save over their peritoneal surfaces. On the left side of the abdomen at the Inguinal ring, there was an opening, through which at one time or other a portion of intestine had escaped —:

This however was now entirely free; no intestine being found there, and no strangulation existing in the neighborhood. The peritonitis, rupture of the intestine, and the death of the man, was undoubtedly caused by the violence to which he had been subjected. After the examination, the intestines which had been taken out and examined in a tub were returned in the abdomen, after which the cavity was closed by means of the uninterrupted suture.

Paraplegia

G. A. age 45. native of Germany. entered the Baltimore Infirmary Novbr. 28th, having lost the power in her right leg, sensibility remaining good; while there is loss of sensibility in her left leg, power remaining good. From her account the loss of sensibility in her left leg occurred about four weeks ago, while the loss of power in her right leg occurred four days ago. She resides in Baltimore County about seven miles from the city. Has had no fall, nor blow, neither has she been previously attacked by any disease. Has no idea what brought on the paralysis. She was attended by a St Vincent. Does not know what treatment he was on.

was directed to this Institution by Dr Parkes. The mercurial foetor has been observed, thus showing he had been taking Hydrargyrum in some form. The muscular coats of the bladder paralysed. No pain along the spine. Dr Quilhalland after examining him directed three to six cups to be applied on each side of the spine. He also directed the following,

℞ Rhei. Pulv. grs V
Oleum Tegli gtt I

Mix. Oft. pill ; S. To be given daily. This to keep up an action in the bowels, and by so doing to exert a revulsive influence upon the disease. He directed as

a stimulating embrocation the Volatile Liniment. This to be rubbed over the Spine morning and night

Nov. 23 Dr. Chew the attending Physician of this Institution, tested the sensibility of both legs by means of a pair of dividers, and came to the conclusion that there was considerable loss of sensibility. The Pathology of this affection is really wonderful. From experiments made upon the lower animals, it has been found that if the Spinal Cord be divided half through transversely, the motion of that side and the sensibility of the other or opposite side will be lost. This is one of the greatest discoveries since the discovery of

of the circulation by Harvey.

The following was directed by Prof. Chew

℞. Opii ℥ gtt. to be given after an evacuation of the bowels and Chalk Mixture after each subsequent operation. adding to each dose of the Chalk Mixture half a drachm of Fr. Catechu. The catheter was to be introduced twice a day to prevent the accumulation of urine in his bladder. His pulse somewhat weak, No pain about his head. Appetite Good. His Prognosis at present is doubtful, not knowing the cause of the disease ℞ No improvement. Prof. Chew directed the Iodide Potassa to be given in five grain doses three times a day. and Fr. Cantharides

in doses of fifteen drops three times daily, this to be continued until strangury is produced. 30th. To day he could move his right leg, showing there is some improvement, &c. 31st. He has lost the power of both legs, sensibility remaining, though much impaired. This case now presents no peculiarity. Motion lost and sensibility impaired, this the ordinary feature of an attack of Paraplegia. The sensibility of the lower extremities is so impaired that one instrument can be felt when the soles of his feet are tickled or irritated. The contents of his bladder have to be drawn off daily by means of a catheter

This fact convinces me that the injury is above the origin of the Lumbar Plexus of nerves. He cannot support himself on his legs. When he first resumed this position he was able to walk with a cane, thus instead of improving he is getting worse. 5th Some improvement. He has required power in his left L.O. is very weak, it requires all his strength to place himself in a suitable position for the introduction of the catheter. 6th He succeeded in passing his water is gradually improving. 13th He has slight motion in his right leg. Sensibility remains in both. 15th The Tr Cantharides discontinued having

produced symptoms of strangury.
Continuing with the pills of Croton Oil and Rhubarb with occasional doses of Castor Oil. 16 He walks about the room on a pair of crutches. thus showing his rapid improvement. 23rd The pills of Croton Oil and Rhubarb producing irritation were discontinued. He has sensibility and motion in both legs. of the two the right leg is the weaker. 31st Considerably improved. He can walk about the ward by assisting himself with a cane. The Iodide Potassa has exerted a beneficial influence in this case by its absorbent and alterative power

January 4th. Left relieved.
still having to assist himself
with a cane when walking.
His general health very good.
This man was quite hearty and
robust. His affection may
have depended upon congestion
producing pressure on the
Spinal cord near the lower
dorsal or first lumbar vertebra.
At any rate the pressure or injury to the Spinal cord is above
the origin of the nerves that supply the Bladder. This was shown
by his inability to micturate. This
man recovering, consequently not having the
opportunity of having a Post Mortem, I could
not ascertain the exact seat of pressure.

Gentlemen

I have brought my prolonged and I fear tedious report to a close. I would fain extend a few words of thanks for the unwearied efforts you have exerted to inculcate (in a mind I fear too often inattentive) the great doctrines that every Student must to a limited extent be acquainted with, before he is qualified to occupy the position that many of us soon hope to fill.

Before closing these remarks I feel it but my duty to speak of the irreparable loss that has befallen this Institution in the death of one of its most honored and beloved members. Not only will he be missed

by this School, but by all who knew him; He was not only fully competent as a teacher to occupy the important Chair which he filled, but as a friend he manifested an interest in us, that will ever be looked upon with the deepest feelings of gratitude. I have been personally acquainted with Prof Chew for some years past. Thus knowing him and knowing the interest he manifested in my welfare. I can but feel that I have lost a true Friend, but I have this consolation that my loss is his gain. He lived a Christian and his prospects for Heaven were bright. To my kind Preceptors Drs P. A. Baller and Saml Chew, son of the late Prof Chew, I offer my honorable thanks for the untiring and kind attention they have extended toward me. Facts delivered by my able Professors they have more deeply impressed upon my memory.

Adieu

An Inaugural Dissertation On Scarlatina

Respectfully Submitted to the Examination of the Provost Regents and Faculty of Physic of the University of Maryland

For the degree of Doctor in Medicine

By

A. Buffington Mahring

of

Maryland

Session 56 A.D. 1864

Scarlatina

This is a contagious febrile disease accompanied frequently during a part of its continuation by a rash and sore throat. There is no disease affecting children in which the mortality is greater than in the disease under consideration; and neither is there any in which greater diversity of opinion exist in the minds of medical men as to the best method of treating it. It is not solely confined to the young, but when it once has gained admission into a family they are all liable to share the same fate. It seems to be a very strange fact that Scarlatina was for a long time confounded with measles, although not so-

strange when we consider that medical men two centuries ago knew but few of the diseases we have on the catalogue at the present day. And we must admit that the diagnoses of Scarlatina from measles in those days must have been difficult, owing to the small amount of knowledge Physcians had compared to our own time, in regard to any one particular disease. In England it was not recognized as a separate disease until some time in the sixteenth century. Ingrassias is the one who is said to have first published a work upon it as a distinct affection in 1556. Morton an Enlish physcian spoke of it under the name of

morbilli confluentes.
But Dr. Withering has received the credit of being the first of British Physicians who clearly and distinctly made out the various points of diagnosis between Scarlatina and Rubeola.
Without assuming the precursory symptoms of languor, weariness, rigors, and pains in the back and limbs, the fever sets in with a frequent pulse, hot dry skin, flushed face, furred tongue, loss of appetite, thirst, and great muscular weakness, but unfrequently there are nausea and vomiting, sometimes there is more or less headache, or other symptoms of nervous disorder, in relation to the severity of the various symptoms

the fever is of every possible grade. The eruption manifests itself in most instances upon the second day of the fever, sometimes, however, earlier or later, and often at the very commencement, which has been asserted by the knowledge obtained of the patient himself or his friends. It usually makes its appearance first upon the face, neck, and breast. Then it gradually spreads over the trunk and extremities, running its course of diffusion in about twenty four hours, which rapidly coalesce in broad patches, and in the course of a few hours generally form a continuous scarlet blush over large portions of the surface, and appears with greater intensity in the

flexures of the joints, as in the groins, armpits, and bend of the knees and ellows. The colour has been described by some authors to that of a boiled lobster: but usually is considered to be of a darker hue. There appears upon some patients, most frequently upon the thorax small transparent vesicles, containing a thin colourless liquid, and resembling what Dr. Watson described as Sudamina. He says. the liquid is soon reabsorbed, and the cuticle under which it had been inclosed shrivels up, turns white, and comes off in a thick white scurf; so that the part from which it separates looks at first sight as if it had been powdered.
The disease attains its heights usually from the fifth to the

ninth day, when in favourable cases, all the symptoms begin to decline. The rash fades, the miliary vesicles if present dry up, the heat of skin diminishes, the pulse becomes slower and fuller, the throat affection abates and the tongue, if it has not previously thrown off its fur, does so now, often however remaining for some time reddish, glossy, and with prominent papillae. Desquamation generally begins with the decline of the eruption. Occasionally the whole cuticle of the palm and fingers separate, so as to form a complete mould of the inside of the hand. The process of desquamation is often attended with a very troublesome itching and irritation, and sometimes with

much tenderness of the skin. It is usually completed by the end of the second week, though sometimes delayed longer in consequence of a succession of exfoliations. During the process if there have no complication occurred, the patient may be considered as well yet subject to the sequelae of this disease unless great care be observed during the convalescent stage. Having endeavoured to portray the character of this fearful disease in a general view, I shall proceed to describe the three prominent varieties. Scarlatina is known to manifest itself under three distinct species. The Simple, Anginose and the Malignant. Scarlatina Simplex or Scarlatina sine Anginosa is distinguished by the absence of the inflammation of the throat

and other unpleasant compl-
ications; which render it less
tedious and dangerous to
the patient. though not completely
Exempt from a mild and
moderate degree of redness of
the fauces, It is characterized
by a fever and rash, The erup-
tion appear on the second
day of the febile symptoms, at
first of a light red, then becom-
ing deeper, and more numer-
ous on the face, neck, and
chest, In the course of twenty-
four hours like spots appear
on the body, lips tongue, and
palate, On the third day
of this stage most of the
interstices which had been left.
become covered with large dotted
patches, The pulse is full and
exceedingly frequent, a coated
tongue, through which the

red and elevated papillæ appear very prominently. About the fifth day the interstices between the patches become larger, the scarlet colour less vivid, and the whole character of the disease is declining until the patient is considered at little risk of life

Scarlatina Anginosa.— In this variety the affection of the fauces is most prominent. Stiffness of the jaws soreness of throat, and the palate, uvula and tonsils are not unfrequently greatly swollen, which are often experienced at the very commencement of the attack. As this inflammation, progresses, all the febrile symptoms increase, and the skin becomes very dry and hot. The rash does not observe the same regularity as in the

simple form: it is usually somewhat later in making its appearance, occurring on the third instead of the second day; coming out in scattered patches, on the chest and arms, But very many instances also occur in which the eruption is nearly or quite as uniform and intense as in the simple, Occasionally it shows a tendency to vanish the day after its appearance, and to reappear partially at uncertain times; and this process is sometimes repeated more than once,

During the decline of the eruption, about the fifth or sixth day, the fever and inflammation of the throat begin to abate, although not unfrequently the throat remains sore for a week or ten-

days after the disappearance of the rash, the patient is very much troubled with a viscid mucus, secreted in the fauces, which he can not well swallow, and finds it exceedingly difficult to discharge from the mouth. Deglutition is difficult and painful; and when attempts are made to swallow liquids, they occasionally return through the nostrils: sometimes the mucous membrane of the nostrils partakes of the disease, and as this stage advances, a yellow and very offensive secretion is occasionally discharged, which is sometimes very acrid, and excoriates the orifices, various secondary affections are apt to occur, which render it of a more grave and protracted nature.

This variety of the disease is much

more apt to prove fatal than the simple; and when recovery takes place, it is more frequently after a long struggle of organic complication.
In a very large majority of cases, the patient does quite well and the disease subsides at the regular period.
Scarlatina Maligna.— In this variety it sometimes differs but little in the earlier stage from Scarlatina Anginosa; though not unfrequently the patient is completely prostrated in the very first onset of the disease. The fever, however, soon assumes a malignant or typhoid character; great cerebral disturbance being superadded to the affection of the throat and skin. There is great irritability restlessness, and delirium,

The tongue is dry and brown; the lips, teeth and gums are covered with sordes; and the breath extremely fœtid. The throat is not much swollen but appears of a dusky-red hue, while the velum, uvula, and tonsils are covered with dark incrustations, consisting of exudations of lymph; in some cases there is gangrenous inflammation of these parts, followed by sloughing. The cervical glands are often involved in the inflammation. Sometimes, however, the patient is conducted through all these untoward symptoms; and then with a shattered system, has not unfrequently to struggle with exhausting abscesses, ulcers and alvine discharges for weeks and months and then finally terminate

in death. Sometimes, however the afflicted and pitiable patient may survive every gradation of the malignancy and ultimately be restored to health. It is always a disease of such extreme danger that only patients with vigorous constitutions survive it. Authors upon this disease entertain the belief, if the seventh day be passed, the patient may be considered convalescent, and at little risk of life.

Scarlatina Without Eruption.— Cases have been recorded were the fever and affection of the throat occur, among the prevalence of Scarlatina, running the exact course of that disease with the single exception, that the eruption is absent, and of such extreme mildness.

Sequelæ.— Patients who have suffered from Scarlatina are very liable to have their health affected through life, with some of the many forms of Scrofula; Sometimes among the most common Sequelæ of this disease are the abscesses which form in the vicinity of the parotid and submaxillary glands. Opthalmia and various diseases of the scalp. But the most frequent and most serious sequel of them all is dropsy. The patient is most liable to the last named sequel, during the period of desquamation; it occurs about two weeks from the commencement of the fever. The cause is by many supposed to be the premature exposure of the delicate skin to cold,

which arrests the functions of the skin. It is generally in the form of anasarca, though sometimes of ascites, hydrothorax, hydropericardium and even hydrocephalus. The affection almost always yields to treatment; but it is exceedingly dangerous when the brain or heart is involved. The dropsy is generally accompanied with scanty and albuminous urine, and is believed to be dependent on an active congestion or inflammation of the kidneys. The anemic condition of the system, which sometimes follows scarlatina may also bring on dropsical symptoms in which case the urine may or may not contain albumen. The patient not unfrequently after having suffered scarlatina,

dies of hectic, the effects of excessive and copious discharges.

Pathalogical Lesions.— Various internal organs are found congested upon an examination after death, The kidneys are often found congested or inflamed; Upon cutting into the skin the superficial part of the cutis is seen to be reddened and infected, The redness sometimes disappears from the fauces, though it often remains if the disease has continued beyond the third day, Often when the patient has died early, no lesions of any kind are discernable

Diagnosis.— In the precursory stage of Scarlatina, before the appearance of the eruption, it may be readily mistaken

for many other of the febrile diseases, The most characteristic symptoms are an extraordinary frequency of pulse, and appearance of redness in the face. After the rash one of the complaints with which it may be most easly confounded is measles. However this may be readily distinguished by the absence of the catarrhal symptoms, and also, by the occurrence of the rash on the second day instead of the fourth. It may be easly recognized by the uniformity of the eruption.

Prognosis.— There is no disease in which the final result is more unfavourable, It not unfrequently happens that two or three children die in one family! and sometimes a

whole family is thus desolated. The disease is exceedingly dangerous in pregnant women. Under other circumstances it is considered that women can bear it better than men. In the latter, it is very prone to a fatal result. Among the unfavourable signs are a late appearance, considerable deficiency, or sudden retrocession of the eruption, in connection with other bad symptoms, as continued delirium, a livid appearance of the rash, with petechiae ecchymoses, or hemorrhage. The absence of the above symptoms, and a gradual subsidence of the disease are favourable signs. It cannot always be relied on in con-

sequence of the various changes the disease is liable to undergo during the course of its progression.

Treatment.— Hitherto the treatment of scarlatina, has been most unsatisfactory, and in the worst forms of the disease most unsuccessful, The ravages of Scarlatina are not confined to the badly drained and ill-ventilated dwellings of the poor, although among the squalid, illfed children of the lower classes the largest amount of mortality prevails; the pest also extends to the homes of the wealthy. When the symptoms are very mild, it is advisable to do little more than to keep the bowels open, to administer cooling drinks, regulate the diet, and to see that the

apartment is well ventilated, and of comfortable temperature, At the commencement of the disease, a gentle Emetic, is thought, to have a happy effect in modifying its future course, It should be administered immediately in every case, when seen at that stage, for its modifying influence, Ipecacuanha may be used, or a mixture of this with Tartar Emetic, In the more malignant form, it is considered useful to follow the Emetic, with a dose of Calomel to produce a gentle evacuation of the bowels, Those of a depletory character, Sulphate Magnesia may be given, if there is much excitement with considerable energy of system, Great care however must be taken not to purge to.

exhaustion, In cases of diarrhoea, castor oil, combined with laudanum, may be advantagously administered. Some strenuously recommend bleeding in almost all violent cases, in the early stage, At present it is used with great caution and reserve, and only employed when there is a manifest indication; as when symptoms of inflammation of one of the vital organs exist, and threaten great danger, In a majority cases, when depletory measures are required, it is best to have recourse to local bleeding, by cups and leeches, When the surface is excessively hot and dry cold sponing is exceedingly beneficial, it quiets restlessness, reduces

the frequency of the pulse, and adds greatly to the comfort of the patient, He should be allowed to drink cold water frequently, though moderately, and hold ice in his mouth if desired. When the stomach is irritable, the effervescing draught should be preferred, If the urine be very scanty and especially if a tendency to delirium or Coma should be observed, Mild diuretics should be employed, such as sweet spirit of nitre, acetate of potassa, bitartrate of potassa, wine of Colchicum root &c. Solution of chloride and chlorate potassa, have been recommended very highly in the treatment of Scarlatina Dr. Watson speaks very favourable of a solution of chlorate of

potassa, in the proportion of a drachm to a pint, as a drink; of which from a pint to pint and a half may be used during the day. In the Malignant form, a stimulating plan of treatment must be resorted to, by a free administration of brandy, wine, and bark. The gangrenous ulceration of the fauces, which so often complicates this form, will also be best combated by the use of stimulants and local application of a solution of the chloride of soda: when very severe, the throat and fauces must be swabbed with a strong solution of nitrate of silver, or the infusion of capsicum, or the powdered red pepper itself

diffused, in vinegar and water is an excellent application.

Different prophylactics medicines have been recommended, among which belladonna is the most conspicuous, Three grains of the extract are dissolved in a fluidounce of distilled water and of which, three drops is to be given twice a day, to a child under one year, to be increased one drop for every additional year, It is said to produce effects analogous to those of Scarlatina, The belief is at present decidedly against its possession of any prophylactic virtues.

An Inaugral
Dissertation on Pneumonia,
Submitted
to the examination
of
the Provost Regent and
Faculty of Physic
of the University of Maryland,
for
the Degree of Doctor of
Medicine,
By John Esgate,
of Maryland.

Pneumonia

Among the many and almost-innumerable diseases to which the human race have been been subject, ever since the creation of man there is none more interesting and probably few more dangerous than pneumonia, it is a malady that cannot be to carefully studied or to which there can be to much importance attached: although a disease locked up as it were, in the breast of the patient, and hidden from human site, yet the practiced ear of the wary physician can trace its devastating

steps through every stage it may assume, and adopt those remedies which nature has so beneficently placed within his reach for its cure.

In writing this succinct and imperfect essay, I shall endeavor to keep always in view the precepts and teachings of our late and much lamented Professor, Chew. He sedously and ardously too, endeavored ~~by~~ precept and example to inculcate in the minds of his pupils the necessity of carefully studying and attending to those diseases which lead if not properly

understood and judiciously and timely treated to the almost certain distruction of life.

And among those diseases may be classed pneumonia.

A disease the essential nature of which, is inflamation of the substance of the lungs, and in order to understand the changes which the lung undergoes it is necessary to be fully acquainted with the sounds which are afforded by auscultation and percussion.

The different stages which are observed in a case of pneumonia have been divided by most authors into three.

The first - is that - of inflammatory engorgement, Second hepatization and third purulent - infiltration.

In the first - of these three stages the Substance of the lung becomes engorged with blood or bloody serum of a deep red color and crepitates much less under pressure than in the natural state, it is also heavier than natural and not so elastic, owing to large amount of liquid effusion deposited within the air cells. when in this condition it is more easily torn and more readily broken down by pressure, this circumstance from

its resemblance to the Spleen has given rise to the term Splenization of the lung, in this State of engorgement the mucous membranes of the small bronchial ramifications are of a deep red color and those portions most engorged, although much heavier will still float if placed in a vessel of water. These changes will most commonly be detected in the lungs in the first Stage; but they are not always present, certain modifications of the disease may cause some to be absent, but as a general rule I think

these changes will be found in the diseased lung in the first stage, but as the disease progresses and inflammation still goes on further alterations alterations may be observed in the texture of the lung, it does not now crepitate under pressure as it did in the first stage it becomes larges and most dense and contains no air, it will no longer float on water, if a portion be now cut it will generaly present a mottled and red apperance, and if a thin slipe be examined it looks granular, and this apperance

is owing to the deposit of lymp within its cells and interstices. The mark of the ribs are also very frequently visible on the outside surface of the lung: when a section is made of the lung in this condition it resembles the cut surface of liver, hense the name hepatization, given to it by Laennec.

On examineng the torn surface of a postion of hepatized lung with the Microscopl, the pulmonary tissue will appear to be composed of a quantity of small red granulations lying very close together, these

are probably the air vesicles clogged up roughness and made red by inflammation.
When the lung is in this condition it is sometimes so soft and friable that a very moderate degree of pressure between the fingers will easily reduce it to a state of pulp; as the disease still advances the lung undergoes more marked change and assumes a different aspect. The pulmonary tissue which was dense solid and impervious to air now presents a yellowish or drab colored appearance, the lung becomes softer and more

like pulp, the small granulations that were seen in the hepatized lung when examined by the microscope have now changed from a bright red to a whitish or grey color, and grey pus may be seen upon the cut surface in the form of minute drops, and this condition of the lung, or third stage, has been called by Laennec, grey hepatization or purulent infiltration. In this condition the pulmonary texture undergoes diffused suppuration and it is a remarkable fact, and one that has been brought to light by the researches of modern authors that

this Suppuration does not lead to the formation of an abscess as it does when it attacks the areolar or parenchymatous tissue in in other parts of the body.

It was thought by the ancient pathologists that the occurrence of an abscess in the lung was a very common thing; but it has been proven by Laennec, Andral and others, who have had an opportunity to ascertain the precise condition of the lungs in pneumonia through its different stages, that the existance of an abscess in the lung is of very rare occurrence

so rare indeed, that Laennec only found one large abscess in the dissection of several hundred bodies that had died of pneumonia.

In examining the lungs of one who has died of pneumonia caution should be observed not to handle the diseased lung so roughly or so as to break the parenchyma for a small cavity carelessly made might be easily mistaken for an abscess. Sometimes pus will be found in the lungs connected with phlebitis or inflammation of the veins, or it may be

present when pneumonia and phthisis exist together in the lung at the same time.

Gangrene sometimes, though rarely, attack the lungs as a result of inflammation, when it does however, it may be found to occupy a larg portion or it may be more circumscribed and found confined to a small spot only. The color of the part which has lost its vitality by the inflammation is a dark olive or greenish brown, and the gangrenous portion is moist and humid and emits a most horrible odor so offensive indeed is it,

that it is almost impossible to stay in the room which the unfortunate sufferer may occupy. This fetid smell is one of the most important diagnostic sign in this condition of the lung.

Inflammation may attack only one lung or it may occur in both, but it is not half so frequent in both lungs as one only.

According to the statistical account of Laennec Andral and others, it will be seen that it happens twice as often on the right side as on the left.

In one hundred and

fifty one cases of pneumonia reported by Andral;
He found that ninety occured in the right-lung; thirty eight in the left, and seventeen in both and the remaining six, the exact situation was uncertain.
Taking this statement of Andrals whose authority is no doubt correct; it shows the greater frequency of the disease in the right side compared with that of the left, and also the very seldom occurence of the disease in both lungs at the same time

The disease generally attacks the inferior lobes, and

as the inflammation goes on it gradually extends upwards until the whole lung or both may be involved.

In most cases of pneumonia the pleura becomes inflamed and reddened, complicating the disease which is termed pleuro pneumonia. in fact it is very seldom ~~to~~, that pneumonia occurs as a distinct disease; it is almost always attended with some other malady as bronchitis pleuritis hepatitis or the miasmatic diseases.

The sounds in the first stage, or that of engorgement when the ear or stethoscope is

applied over the part affected is that of fine crepitation or crepitant rhonchus resembling the rubbing of a lock of hair, close to the ear or the rumpling of a fine piece of parchment, This sound is produced by the bursting of minute little air bubbles contained within the smallest ramifications of the bronchi and air vesicles of the lungs, These sounds are not always distinctly audible at first;

they are sometimes obscured by the natural vesicular murmur but as the inflammation goes on the vesicular breathing gradually ceases, and as the lung passes

from the first stage to the second; these sounds are changed for new ones; we do not hear the crepitant sound any longer; but in its room, a blowing whistling sound like that produced by blowing in a tube; this sound is called bronchial, produced by the solidification of the small tubes and air vesicles, which conduct the sound, from the larger bronchi to the solidified portions of the lung. There is also an alteration in the voice, bronchophony as it is called. The voice is more resonant than natural and the words are muffled and indistinct

and if percussion be made over the solidified part, it will produce a dull flat sound, now if the disease still runs on, the structure of the lung is distroied and portions of it may be expectorated, this gives rise to gurgling crepitation owing to the introduction of air into the vacant parts, This last condition of the lungs is what happens in the third stage.

The general signs that characterize an attack of pneumonia are first a chill followed by an inflammitory fever, The pulse are increased the skin hot and dry the countenance wears, an

aspect of uneasiness and distress; there is more or less pain felt upon the affected side just below the nipple; there is cough and expectoration, but sometimes the expectoration is absent, when it does occur it is generally of a dark color, but not always, it is sometimes greenish or a dirty gray, but this is oftener observed in gangrene.

We most commonly see in cases of pneumonia, what is termed the rust colored sputa, which is an important sign in the diagnosis of the disease, in fact there is few cases, which

do not, at some period in the disease present this sign.

Dyspnoea is also apt to be present; in some cases it is so severe, that the patient seems to be wholly occupied in respiration paying very little attention to what is going on around him. In other instances indeed, it is entirely absent and the patient breathes with ease and comfort. When the dyspnoea is very violent delirium is apt to come on and this is a very dangerous symptom: it denotes that the blood is not sufficiently oxygenated to carry on the functions

of respiration and that the brain is suffering from the venous blood circulating in it, which the diseased lungs have failed to arterialize.

The cough of pneumonia is not a very characteristic sign, it is sometimes severe, at other times it is only slight. It is most commonly dry in the first of the disease, but it very soon becomes changed and a copious expectoration will take place, of rust colored mucus which is very tenacious and will adhere to the bottom of the vessel in which it is contained if it be turned bottom upward

The sputa of pneumonia differs greatly from that of bronchitis which is streaked with blood and does not adhere to the bottom of the vessel like pneumonia. The blood in pneumonia on the other hand, appears to be mixed and amalgamated together, (to use the words of Watson) with mucus, and in proportion to the quantity of blood, the sputa becomes of a yellow color or rusty appearance and the mass becomes glutinous and tenacious and and it will adhere together. In the first stage however the discharge is not so viscid

and tenacious, but as the lung goes from the first, into the second stage it then assumes this viscidity of character.

When the disease has thus far advanced and these symptoms are well marked it may terminate in resolution or go on to the stage of infiltration. If it terminates in resolution the dyspnoea gradually subsides, the sputa which is now viscid rust colored and opaque, will gradually assume its natural character. The chest if percussed yield its natural sound, and those morbid sounds afforded by auscultation which have been

noticed will be replaced by the natural ones of health and the patient will soon be well again. But if resolution does not take place; the symtoms will be aggravated there will be more dyspnoea, the breathing will be short and hurried the face pale and eyes dull and motionless. the patient cannot speak above a whisper and that with difficulty, and the prune juice expectoration will be more copious and with difficulty expeled, the patient lies on his back unabled to keep any other posture. When in this condition the result of the case is very uncertain.

The causes of this disease are very numerous. Any thing that has a tendency to debilitate the system. Such as cold, sudden changes, external violence, obstructions in the air passages, Anyone of the above named causes may bring on an attack of pneumonia. It is said sometimes to occur as an epidemic, but more generally it is sporadic. It is more apt to attack persons of intemperate habits whose constitutions are broken down and enfeebled. They are not so able to resist the disease as the more healthy and abstemious. Very young children are

also frequently attacked by pneumonia, And in fact the extremes of age, are more subject to it. than persons in middle life.

The duration of pneumonia is from ten to sixteen days. but some cases may terminate as soon as the fourth or fifth day, and in others it may run on to six weeks and even longer.

The prognosis of pneumonia is very uncertain. In the very young and very old it is always doubtful.

The treatment.

The agents that have been most employed in the

treatment of this disease, as blood letting, mercury, and tartar emetic,

There has been a great diversity of opinion between the members of the profession as regards the treatment of pneumonia by blood letting. And it was the custom of the older Physicians to practice it on all occasions, When called to a patient labouring under pneumonia, the first thing that was done, was to bleed to syncope and sometimes to convulsions. But this practice has gone very much out of use. Experience and observation has

proven that the indiscriminate use of the lancet, without reference to the condition of the patient is not only injurious, but in a great many cases absolutely fatal, There is some cases that require the use of the lancet, and a practitioner should be able to discriminate between those that require bleeding and those that do not, The timely and judicious use of the lancet, has probably saved many a patients life that would have been lost had it not been for its use.

We should be guided by the condition of the patients constitution

If he be plethoric, with a strong bounding quick pulse, hot and dry skin, it will be proper to bleed, until some effect is produced upon the pulse, and probably one bleeding will not answer then it will be advisable to open the vein and allow the blood to run until a sensible effect is again produced, leeches are also very useful as an auxiliary to the lancet; these may be applied over the seat of pain, or over the inflammed portion of the lung. The timely abstraction of blood tends to fulfill two indications. In the first place it relieves the

inflammation, and in the next place it relieves the over loaded lungs of the increased amount of blood, which is now interfering with their functions and consequently very much embarrassing their actions.

The next great agent in the treatment of pneumonia is tartar emetic, This remedy is scarcely less efficacious than the one just spoken of; It should be given after the bleeding in small doses inside of the point of emesis, but sufficiently large to keep up a nauseant effect, one half grain will in most cases be sufficient

If sickness and vomiting should come on, it will be necessary to add a small quantity of opium to each dose, or one or two drops of hydrocianic acid, it will be noticed that after a few doses of tarter emetic be taken, tolerance will be established and the dose may be gradually increased to a grain and a half to two grains.

Tarter emetic sometimes acts on the bowels, producing diarrhoea when this is the case it will be necessiary to add from a quarter of a grain to a half of opium to each dose

The next agent we have to speak of is Mercury. This remedy has been termed the Sheet anchor, in the treatment of pneumonia, and well it deserves its name.

But it should not be incautiously or injudiciously used.

It should be given in sufficient doses to produce a slight impression upon the system, but should not be carried so far as to cause profuse ptyalism. Calomel may be given in small doses, frequently repeated or it may be given in larger doses, at longer intervals.

Should it have a tendency to run off by the bowels it

it must be combined with laud-
anum or opium in sufficient
quantities to insure its action
on the system. If the bowels are
irritable and will not bear the
administration of calomel some
of the milder preparations of Mer-
cury may be substituted for it,
such as the blue pill or hydrargy-
rum cum creta. If these preparations
prove irritating and cannot be
borne, Mercurial ointment may
be rubed in the axillas and
down the thighs with advan-
tage.

This mode of treatment will
in many cases suffice to cure

the patient. But should it fail and the disease run on to prostration, and the powers of life begin to flag, other modes of treatment will have to be adopted. When the pulse become feble and irregular and there is coldness of the extremities sunken features and every evidence that the patients vital powers are giveing way. he must be supported by stimulents and anodynes, such as the carbonate of ammonia, camphor assafoetida. Wine in small quantities often repeated will be very beneficial. A large blister placed over the chest

will also give great relief to the patient.

The diet of the patient should be mild and unirritating Beef tea or milk and rice may be allowed. This ends what I have to say in regard to the treatment of a case of Sthenic pneumonia. There are a great many case of pneumonia complicated with other diseases which will require different modifications of treatment, and they will have to be left to the judgement of the Physician in each particular case.

Respectfully Submitted
by John Esgate