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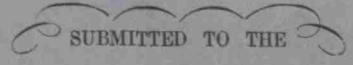


AN

INAUGURAL DISSERTATION,

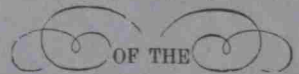
ON

*Typhoid Fever.*



SUBMITTED TO THE

PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY



OF THE

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DOCTOR OF MEDICINE.



BY

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OF

*Yeuette.*



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## Typhoid Fever.

In attempting to write an Essay on this subject I do not expect to advance any thing new, nor to go into a full investigation of the disease. I have neither the time nor the ability to do this. Because I know nothing of the disease except from slight observation, and I shall have to rely chiefly upon the information received from the Faculty, and such other knowledge as I have gained from distinguished authors who have written upon this complicated disease. I confess I am at a loss, at what point to begin; not that the subject is barren or uninteresting, but that its amplitude is so vast and important. It comprehends so much; its bearings are so many, that I find myself in a labyrinth of confusion, while endeavoring to select and arrange such portions as

may be best adapted to a short dissertation. Notwithstanding, this disease has been investigated by every grade of Physicians, from the prating bombast, of the quack, to the most scientific minds that ever figured upon the arena of the medical world, yet there are some truths, that are mysteries untold and unknown, and when properly understood will shine with a lustre inconceivable, and bright as the lumbeum of ~~Heaven~~ <sup>Heaven</sup> in <sup>its</sup> meridian glory, and may we not hope that the indefatigable efforts now making by the truly distinguished Professors of our own State, will be able to draw aside the dark veil that now enshrouses the cause of this disease, thereby directing us of its fatality, and causing its treatment to be as thoroughly understood as the most



the most simple Intermittent or Remittent  
Fever. Although ignorant of its true causes  
we know that its access is generally slow  
and creeping. The patient is not aware of  
its approach untill he is fairly within <sup>its</sup> ~~his~~  
clutches. He feels a little unwell, but not  
sick, an inability to perform his usual  
round of labour, either physical or mental  
Goes moping about. He feels a dull heav-  
y pain either in his head or his limbs. His  
countenance becomes dull and listless. The  
eye loses its brilliancy, the mind may be ei-  
ther indifferent or apprehensive. These symptoms  
are gradual in their progress, the disease, be-  
coming more apparent each day. ~~to~~ <sup>so</sup> ~~the~~  
At length, seizes upon the patient, that he is un-  
able to date the period of its attack.

In other cases, the disease makes its appear<sup>ance</sup>

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suddenly, with all the more alarming symptoms, well marked. He may either have a Diarrhoea, or his bowels may be constipated in this stage of the disease, which lasts about ~~about~~ a week. he will have chills which may be repeated several times. The chills usually come on during the day, and are succeeded by a slight fever, with a tendency to fade out. Frequently there are two exacerbations, during the day, one in the morning, and the other in the evening; and here I would remark upon the most distinguished authority, that the use of Quinine will stop the chills, but will not have any sensible effect upon the fever, and this in my opinion is one of the most unerring diagnostics of the disease. With regard to the state of the skin, there is a great difference in this disease. In some cases it is moist, but more frequently dry and hot - Sometimes this heat and dryness

the breathing. When the disease, particularly  
in the last stage, ~~is~~ accompanied by biliousness  
or stupor, the Respiration is irregular, noisy &  
hissing; This may be attributed more perhaps  
to the state of the brain than to any disease  
of the Lungs. The patient has almost invariably  
a dry cough, attended by only slight expectora-  
tion. Sometimes sometimes with blood. <sup>remarked</sup>  
~~that~~ <sup>arise</sup> upon the access of the disease, that the patient has  
headache, pains in the back and in the extremities  
; these pains are usually felt in the early stage of  
the disease, and though sometimes lancinating,  
and acute, are mostly of a dull heavy charac-  
ter. The eyelids frequently become sore and tender upon  
pressure, and these symptoms generally continued  
throughout the disease. Sometimes in the early part  
of the disease and always in the last stage, the  
mind is affected with listlessness and languor



<sup>patients</sup>  
The <sup>patient</sup> comes irritable and fretful; and he is un-  
able to think coherently, and takes no cognizance  
either of time or passing events. In cases that are  
even mild, these symptoms frequently continue to  
the termination of the disease.

Another companion of the Typhoid patient, is,  
Delirium. This symptom is seldom present  
during the first stage, but generally overtakes  
him in the third part of his journey, though in  
some cases it manifests itself at an earlier  
stage. If the case is grave and serious, the patient  
will exhibit a wild countenance, will start from  
his bed, and go round his room, if not restrain-  
ed; will catch at imaginary objects, <sup>or</sup> employ  
himself in catching and picking at the bedclothes.  
In cases of a milder nature, the delirium is of that  
nature called "low or muttering". The patient fre-  
quently declares that he is perfectly well, which is

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regarded as an unfavourable symptom. During  
the past summer, I saw a case of this kind which  
terminated fatally. In some instances the moral  
principle seems to be affected long after the rec-  
overy from this disease.

The countenance of the patient is almost always  
indicative of the grade of this fever. In mild  
cases, there is dulness and vacancy <sup>of the countenance</sup>, but in  
those cases that <sup>are</sup> serious and grave there is mixed  
<sup>with</sup> that vacancy and dulness, a degree of anxiety & dis-  
tress. Sometimes this disease is accompanied by  
a continual disposition to sleep, at other times  
a distressing wakefulness attends him.

Seeing and hearing in the first of the disease  
are generally preserved, but gradually fade out  
as the disease advances. Extreme prostration  
of muscular action is a phenomenon char-  
acteristic of this disease. The patient usually



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retains his position in bed, and suffers himself  
to be moved, without any exertion on his part.  
But when delirium ensues, he becomes restless,  
and in many cases, when the disease is about  
to terminate fatally, there is generally an irreg-  
ular contraction <sup>of</sup> some of the muscles, about the  
hands, wrist and face, usually termed "tremor  
tremor". The diaphragm is also affected  
and produces hiccup. Sometimes, as in the arm, the  
contraction of the muscles is permanent; and is con-  
sidered an almost infallible evidence of the <sup>fatal</sup> nature  
of the disease. The tongue, in slight cases, is scarcely  
affected, but when the disease is important  
the tongue is generally covered with a glutinous  
exudation, tenacious in consistency, and adhere-  
ring closely to the tongue. After a few days, this  
coat gradually assumes a dry and dark  
appearance with <sup>or</sup> stripes down the middle. Tip

<sup>re</sup>  
 edges being red; or perhaps this coat will be-  
 come black hard and fissured - This will come  
 off in flakes, leaving the tongue red, naked and  
 shining, as if polished, and this process, when  
 the case is protracted, may take place several  
 times during the disease. There is another  
 condition of the tongue, which is peculiar, and  
 striking. When the tongue at the tip and edges  
 becomes morbidly red - the middle has the thick  
 black mucous coat extending down nearly to the  
 end which is dry and cracked; the tongue  
 is narrower and rounder, the patient protrudes  
 it with difficulty and <sup>is</sup> seems to adhere to the  
 lips. In protruding it the motion of the tongue  
 is tremulous. The appetite in this disease is  
 entirely destroyed. There is no disposition for  
 food, and this sometimes is accompanied  
 by irritability of the stomach. Yet no medicine

are usually better retained, than in any other  
family of Fevers. Here, I might notice another  
symptom, which is a gurgling sound, in swallow-  
ing water, which is owing to the presence of air  
in the stomach, accumulating to such an <sup>amount</sup>  
as occasionally, to produce difficulty of breath-  
ing. The diarrhoea of which I have spoken before <sup>may</sup>  
or may not be present but <sup>it</sup> usually exists in some  
form. The discharge from the bowels in mild cases  
shows the appearance and consistency of chyle  
but in aggravated cases it is of dark colour and  
of fetid odor. Blood is frequently mixed with  
the discharges, and sometimes copious hemorrhage  
from the bowels ensues. The severity of the diar-  
rhoea generally corresponds with the gravity of  
the case. Abdominal pain is another symptom  
of this fever - Perhaps this pain may only be pro-  
duced, by pressure, but sometimes it is the only



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soured of distress to the patient, and, if attended  
by Peritonitis, the usual symptoms of that dis-  
ease will manifest themselves. Tympanitic dis-  
tension <sup>of the abdomen</sup>, is sometimes present, and only when con-  
nected with Peritonitis, is considered a fatal  
symptom. This distention varies in degree  
from the slight distention of the abdominal  
muscles, to such a degree as to effect by its me-  
chanical action upon the lungs, the breathing of the  
patient. It rarely passes off by the anus and  
seems to be but little disturbed by the peristal-  
tic motions of the bowels. As one of the Elements  
of our diagnosis I might here mention the  
gurgling <sup>sound</sup>, which is produced by pressure  
over the region of the cecum. If this pressure  
is made by both hands alternately, that sens-  
ation and sound will very seldom fail  
to be elicited.

Emaciation, <sup>the</sup> State of the urine and Excretions might here be mentioned as symptoms of this disease - Emaciation takes place after the end of the second week, and is often carried to the greatest extreme - In this disease, if terminating fatally at an early period, it is seldom noticed - When the disease is slight the urine is copious, but not high coloured, but and deposits no sediment; As it advances, the urine is more scanty and high coloured; and the sediment is large. In the Typhoid fever at Venaria, no sediment was deposited but a slight cloud of Mucus. Hemorrhage from the nostrils is quite common in this disease generally small, but sometimes profuse, requiring the aid of the Physician - It is not followed by any relief, and in the later stages of the disease is of serious import. In the course of Typhoid there is an eruption peculiar to it. It makes

its appearance about the end of the second week upon the abdomen and chest. It is a lenticular rose coloured spot, resembling a flea bite - from a half a line, to a line and a half in diameter slightly elevated, but not always sensible to the touch.

<sup>Case</sup> The Professor of the Theory and Practice of Medicine has never been able to detect them by the touch. Their apices are rounded, their bases gradually pass into the surrounding surface. Their margins are not well defined: disappear on pressure but resumed their characters, when the pressure is removed. They never change their appearance during their stay, which is three or four days. But few of them are seen at a time - Some coming <sup>out</sup>, while others are disappearing - No traces of them are left. Another eruption on the neck, is also observed called *Sudamina* varying from the size of a pinhead to the size



of a split piece, formed by the presence of lymph elevating the cuticle; they are seen best when viewed obliquely. They appear about the end of the second week. When the patient is very much emaciated eschars are often formed about the superficial ~~about~~ of the palms &c. The skin ulcerates and gangrene frequently ensues. In Typhoid fever various Anatomical Lesions exist. In the heart the alteration consists principally in a diminution of its consistence, and general flaccidity, which may be found combined or separate. The Aorta, is often found changed from its natural to a morbid redness. This redness sometimes reaches through the inner to the middle membrane of the Cardiac cavity. The brain and lungs also suffer. The former will sometimes exhibit moderate serous effusion between the arachnoid and pia mater, a rosyring in the cortical substance and injection of its medullary portion, the latter upon the posterior

and lower portions, is of a deep bluish ~~red~~ color  
with a tough leathery feel; In many cases the lungs  
and <sup>brain</sup> present no unnatural appearance.

The most general lesion of the spleen consists in  
the augmentation of its volume; being in some cases  
triple its natural size. In many cases it becomes  
soft and flabby. The only alteration in the liver  
is, that it becomes in some cases softer than  
usual. From the symptoms already described we  
would presume, that the Stomach had suffered  
intensely. A slight change of color frequently presents  
itself, and we sometimes find in it a change of con-  
sistence and even ulceration. A softening of its  
whole mucous membrane is often observable, but  
most generally confined to the cardiac extremity.  
In those cases that terminated before the 25<sup>th</sup> day  
of the disease, a thinness of the Stomach may ac-  
company this softness, and these combined may

produced its destruction. There is one lesion that  
supervenes in the disease under consideration  
which is peculiar to it. I refer to the lesion of  
the small intestines, found only in this disease  
and is therefore the great characteristic as well as  
the most interesting and important pathological  
element of Typhoid fever. I shall therefore proceed  
to its description. The Duodenum is sometimes ma-  
lignly ~~red~~, but often its mucous membrane appears to  
be in a healthy condition. Glands sometimes ex-  
ist, and a considerable quantity of mucus, particu-  
larly in the upper portion of these intestines, with li-  
quid bilious discharges of a light yellow or orange  
colour. Coagulated blood may be found, where  
hemorrhage existed; and the blood may be dark  
and grumous. When there has been no hemor-  
rhage, an infiltration of blood may be found. It  
may be either slight or extensive and it is generally



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continued. It varies from ~~the~~ rose to a dark red  
with a peculiarly bright and glistening appearance;  
and, is intimately connected with hemorrhage from  
that portion of the bowels - Sometimes the Mucus mem-  
brane is uncommonly red and extends through  
a large portion of the intestinal tube. When the dis-  
ease is protracted, the colour may be grayish. Of-  
ten the consistence of the membrane is diminished  
but it is not always so; when much diminished  
it resembles a layer of paste spread out on the  
surface. Peyer's Glands or the elliptical plates  
of the lower part of the small intestine may  
be so much affected with Lesion as to form  
openings into the abdomen producing death.  
Calculation may be produced without forming  
openings, and the plates will be found increased  
in thickness and width, and their edges will project  
a little above the surrounding mucus membrane

In the large intestines and the lymphatic glands  
we sometimes meet with alterations. The former  
is subject to distention by flatulencies and ulcera-  
tion. The flatulent distension is sometimes suffi-  
cient to push the stomach, lungs and diaphragm  
above their proper position, which accounts for  
the extreme tympanic enlargement of the abdomen.  
The glands of the mesentery, when death takes  
place in the early part of the disease, are increas-  
ed in size, diminished in consistence, and  
are of a red colour; if life is prolonged be-  
yond the third week, they are less diminished  
in volume, not so soft, and are marked by  
gray and violet shades. Sometimes the glands  
are softened, enlarged and red opposite to  
the plates of the intestines which continue healthy.  
The glands of the meso-colon are often similarly  
affected. With these remarks upon the symp-

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I will close this part of my essay. I said at the commencement that the cause of this disease was unknown; yet, there are a few circumstances that seem adapted to its origin. These are age, recent residence in a place and contagion. The disease though not confined to any age, prevails more extensively among persons between the age of twenty and forty five; and rarely occurs after the fiftieth year. It is also believed that ~~more~~ <sup>more</sup> males are <sup>more</sup> subject to its attack than females.

Recent residence in a place seem to favour the production of this disease as is proved from the researches made by the Medical men of Paris. Upon its contagion there are very different opinions. Some affirming that it is never propagated in that way; while Nathan Smith, and other celebrated men



as far as contagion is concerned, rank it with  
Measles, Small pox and other diseases gen-  
erally admitted to be contagious. I have  
noticed these opinions, and after having  
examined them <sup>for</sup> carefully, I think that  
this cannot be classed with the contagious  
diseases. - ~~I think~~ It is the general received  
opinion, that the duration of this disease  
is between fourteen and sixty days, <sup>and</sup>  
and its mortality is about five per cent.  
Relapses in this disease are frequent and often  
accompanied by red spots. The sequel of this  
<sup>disease</sup> are swollen and painful state of the legs &  
Tubercular Consumption. In Strumous  
patients, consumption follows immediately  
and runs its race with rapidity, to a fatal  
termination. Prognosis. Sudden attacks  
of Typhoid fever are more apt to terminate

favorably than when the disease is shallow &  
creeping in its access. A pulse more rapid  
than 120, or 130. thirty in the minute, is to be consid-  
ered unfavorable. Dyspnoea, attended, with a  
a hissing sound, and delirium in the early stage  
if wild and violent, are indications of danger  
to the patient; so are somnolence and Coma.  
Subcultus Tardium, or spasmodic con-  
traction of any of the muscles are unfavor-  
able. Permanent rigidity of the muscles of  
the leg or arm indicate danger. On the contrary  
an elevated eye and <sup>the</sup> recognition of his  
friends, the recollection of circumstances that  
have transpired are ominous of a return  
to health. A very black cracked and dry tongue  
with an incapacity to swallow, are dan-  
gerous symptoms. Hemorrhage from the  
bowels and involuntary discharges; Retention  
of urine, and erysipelas are alarming sym-  
ptoms.

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Diagnosis. It might at first seem difficult to distinguish Typhoid fever from any other form of disease accompanied by some of its symptoms, but by watching the symptoms as they occur, and paying particular attention to such as we have named, we could hardly ever confound it with any disease partaking of a few of its symptoms. Erysipelas may exhibit many of them, but in erysipelas, we will always find at its commencement, the presence of cutaneous inflammation.

Typhoid fever can be distinguished from gastritis by a greater degree of debility in the former and by its being attended by delirium during the night, by diarrhoea. The same symptoms present, diarrhoea excepted, also distinguish it from entero gastritis. In meningitis, and Typhoid fever we find some symptoms that are



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alike, but in Typhoid fever there is more equality of the pulse than in Meningitis. Spontaneous nausea and vomiting are more common in the latter than in the former, and the pain in the head is also greater. Meningitis is accompanied by constipation of the bowels which does not exist in Typhoid fever. The early stage of meningitis is often attended <sup>also</sup> by delirium which is seldom the case in Typhoid fever. Enough has been said upon the diagnosis of this disease and I will pass on to its treatment. When it is remembered that this is a self limited disease & that its tendency is to debilitate the system, it is evident that active remedies are not to be brought into requisition - The physician is seldom called to treat this affection in its forming stage as the invasion is generally

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so insidious as not to excite the apprehension of its victim, until its symptoms are more fully developed. Should the physician be called during the first week it would be necessary to evacuate the bowels with turpentine and oil or some other mild purgative; to enjoin rest, and to give acidulated potions with a view to deacidphoræsis. For this purpose carbonate of potash and citric acid in proper proportions will suffice. If the body of the patient is hot it should <sup>be</sup> sponged with cold water and vinegar. This plan of treatment varied to suit particular cases will constitute the treatment during the first week. Should the symptoms be fully developed before the physician is called ~~in~~ which is usually the case, the treatment should be commenced with some mild cathartic. The Turpentine, <sup>if constipation is present</sup> and oil will answer

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a very good purpose. If local inflammation exist, depletion should be used either locally or generally. The patient having been purged and depleted if necessary, the latest and most successful mode of treatment, is, the exhibition of small doses of Spirits of Turpentine at regular intervals. This article is used and recommended by the most of the standard authorities in certain stages of Typhoid fever. Its efficacy was not fully demonstrated till quite lately, and the discovery of its great sanative influence in this direful affection will mark an important era, in the triumphs of medicine. The Mucilage of Gum Arabic and a small quantity of Spirits of Lavender will form a suitable vehicle for its administration, and it should be given regularly throughout the whole course of the disease. Other symptoms must be treated as they arise. The Diarrhoea must be



controlled by pills, made of Sub Nitrate of Pot-  
 ash, Nitrate of Silver and Opium. An ano-  
 dyne composed of equal parts of Nitre and Paregor-  
 ic should be exhibited at night. Upon the super-  
 vention of delirium cold should be applied to  
 the head; and cups or a blister to the back of the  
 neck. In case of hemorrhage from the nose a  
 tampon should be used and kept in place  
 till the epistaxis is arrested. Hemorrhage from the  
 bowels is best arrested by <sup>the</sup> injection of cold water. In  
 the latter stage when the patient is much debilitated,  
 stimulants are indicated, such as wine, brandy  
 &c. and, if the patient cannot swallow, injections  
 of stimulating and nutritious substances must  
 be employed. In conclusion I would  
 state that the experience of the Profession  
 is against the use of mercurials and  
 at the head of the list of those who pro<sup>scribes</sup>

mercury in this disease, <sup>at least</sup> our own credulity  
and Scientific Professor W. H. Bowling