

AN

INAUGURAL DISSERTATION,

ON

Dyspepsia

SUBMITTED TO THE

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BY

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OF

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M.F.M.
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Gentlemen.

In becoming a Candidate for the exalted, and honorable degree, of Doctor of Medicine — it is made incumbent on me, by the rules of your institution, to write a Thesis; or dissertation; on some subject connected with the Medical profession: and in the performance of this duty, I know no subject better suited to my powers, or one on which at the present era; more might be more appropriately; or profitably written, than the subject of

Dyspepsia, or Indigestion

By this term is generally understood, a disturbance in the natural functions of the stomach, whereby the process of digestion and assimilation is deranged — This disease is not unfrequently, confounded with chronic gastritis; and indeed, such are the points of resemblance

at certain stages, that it is difficult to dis-
-criminate between the two; so much so that
I cannot in a treatise so condensed, as this
must necessarily be, enter into all the minute-
-ties of resemblance between the two diseases

It will be sufficient, if I succeed
in pointing out a few of the many causes
which produce Dyspepsia; together with
such remedies, as will most likely affect
a cure, or at least mitigate the symptoms
of the disease; and in order to do this
I must first say something of—

The Physiology of Digestion— Digestion
then is defined to be, the commencement
of assimilation, or of that process, by which,
in animals, their food is by successive mu-
-tations, converted into a liquid that is to
circulate as a living, and vitalizing agent

"through their frames" — In order then that
the food be perfectly, and healthily di-
gested, it must be well masticated, and
mixed with the saliva, before entering into
the stomach — In the stomach it should
be reduced to a pulp, or semifluid mass;
by the grinding, or vermicular motion of that
organ, and by mixture with the gastric juice

This pulp, called chyme, must then be
transmitted, through the pylorus, into the
duodenum; there to be mixed with the
bile, and pancreatic juices; and with the
mucus of the intestines. The whole is then
divided into two parts; the one, a fluid call-
ed the chyle, is in a proper condition to
be taken up by a set of very minute vessels
opening on the inner coat of the intestin-
al Canal, called the lacteals, and

and by them is carried into the blood, to be distributed to the various tissues of the body. The other portion is the effete or refused mass, which is conveyed along the intestinal canal, to be voided per rectum. — The period required for the entire process of digestion, in the healthy stomach is usually reckoned from three to four hours. A good deal of the digestive process, however, must necessarily be hypothetical, as there never been but one opportunity offered of making direct experiments on the stomach, and this is the case as often cited by authors, of Dr Beaumont and the young Canadian, Alexis St Martin; who having received a gunshot wound in one side of the abdomen, penetrating the stomach, healed; leaving a permanent aperture, through which

— food was at various times, inserted into the stomach. — I am not aware, that any similar experiment has ever been made

The Symptoms of dyspepsia in its inefficiency, are generally of a nature so trivial, as scarcely to arrest the attention of the patient; and consequently medical aid is seldom sought, until the digestive powers are considerably impaired. Some of the most common of these are the following — The patient usually experiences a sense of uneasiness in the epigastrium, unaccompanied with pain; but at times very annoying, and is generally worst when the stomach is empty being in a great measure relieved, when that organ is distended. Very frequently, and indeed, I believe in almost every case; there

There is present when the stomach is empty, a sensation of burning or gnawing, arising doubtless, from a high degree of irritation, existing therein. — Another very common symptom, and one that usually occurs, some two or three hours after eating, is a sensation as of a lump, or ball, rolling about in the stomach; and I have known this to be mistaken, for a collection of worms, twisting themselves into a knot or ball. — This feeling arises from portions of food remaining in the stomach, beyond the period when they should have been digested, and passed through the pylorus. — Another symptom is that of heart burn, as it is generally called, and is owing to the presence of an undue amount of acid, in the stomach. This condition of the stomach, is frequently attended, par-

particularly, a short time after meals, with
eructations of an acrid, bitter, and oily taste
which are usually called sour belches

Not infrequently, does the stomach
become so irritable from the accumulation
of this acid, that the patient is compell-
ed to eject a portion of almost every meal;
and sometimes this irritation extending
to the bowels produces a most exhausting
diarrhoea — There are other symptoms
accompanying this disease; which although
they have not their origin immediately in this
organ, are, nevertheless, connected either direct-
ly or remotely with it. These are, what are
generally denominated the sympathetic, or re-
flex nervous symptoms; — of which, I shall
mention the not infrequent, disordered con-
ditions of the nerves of sense; as presential

vision, swimming of the head, and nervous
or sick headache. Sometimes, there is
a dull, heavy feeling commencing in the
occiput, and gradually extending itself
over the whole cranium, as if the brain
was being compressed; and such is the dis-
position in such cases, that the patient
can scarce refrain from sleep. This, I
might remark, is one of the most common
symptoms of dyspepsia, and one too, which
unfortunately we see manifested almost every
day. A very few moments of repose, however,
is usually sufficient, to remove this unplea-
sant feeling. There is also another
very common symptom accompanying this
disease, that of pain in the region of the
kidneys, often very severe, particularly on ri-
sing in the morning, and accompanied

with very highly colored discharges of urine
— Patients affected with dyspnoea,
are usually low spirited; and inclined to be
irritable and fretful, with an inclination
to physical exertion; and very often, ^{imagining} them-
selves affected with various incurable disea-
ses, and to regard the future with the most
gloomy forebodings — Not unfrequently, there
are palpitations of the heart, at variable pe-
riods, accompanied with a dry, hacking,
Cough; and these tend to confirm their
most melancholy impressions — The sleep
is usually broken, and unrefreshing — The
patient is seized with nightmares, or is dis-
turbed by horrid visions. Occasionally, how-
ever there is a cessation of the more distress-
ing symptoms, and he enjoys a few moments
of uninterrupted and refreshing repose.

The appetite is very capricious, — often changing from a state of anorexia, to the most voracious; as soon as food is taken into the mouth, — The bowels are generally constipated, — the feet and hands cold, — sometimes however hot and burning at night,

The surface is usually dry, except in very debilitated conditions; when night sweats are frequently very copious — Neither the tongue, nor the pulse, can afford us any certain sign by which to diagnose this disease.

The tongue is furred only slightly, and at variable periods; but is more commonly red about the edges and tip — The pulse is also very variable, but is more frequently weak and quick than otherwise — These being some of the most prominent symptoms, of this disease, we are not to expect to find all of

them present, in every case; for perhaps no two of them will be precisely the same in any two individuals. — The Causes of this disease are such, that it has been very appropriately termed, "the disease of Civilization."

Some of the most obvious, are the following — A want of proper exercise, combined with an excess of diet; or with improper articles of diet. — In order that the stomach digest properly, a certain amount of exercise is necessary, for it, like the other organs of the body acts only, in proportion to the exercise ^{it} receives. But, if instead of this exercise; many changing from active, to sedentary habits; either from ignorance, or negligence, continue the same amount and quality of food; — the result is; an habitual distention of the stomach, accompanied by an alteration in the properties of

the gastric secretion - which produces a torpid, and debilitated condition of the bowels, which continues in the same disproportion with the ingesta; ultimately terminating in permanent, gastric depression, and debility.

The use of stimulating articles of diet, such as the spices, used in preserving food, and articles difficult of digestion, exercise the same influence on the stomach, as over-distention by too much food - Other very common sources of indigestion are - the use of alcoholic liquors, - Coffee, tea, and last, but by no means the least, is the habit, so much indulged by a vast majority of our citizens - the use of tobacco, - These all act as nervous stimuli; and by exciting the nervous energy to an inordinate degree, produce secondary depression; thus destroying -

= gradually the energy of the organ — In-
-tense mental emotions; as anger, grief, and
fear, also protracted study, or excessive muscu-
lar exertion; — by cutting off the nervous ener-
gy from the stomach; serve to retard the
digestive process.

The Pathology of this
disease having already been partially given,
it will be unnecessary, to say but little more
than to recapitulate what has been stated,
in order that we may better understand
the application of the remedies. This
disease then, consists, essentially, in a depre-
-ssed condition of the stomach, either from
the withdrawal of its accustomed stimulus;
or by a sedative influence, exercised upon
it, by the loss of excitability, consequent
upon excessive stimulation or distention.

In either of these Conditions, it is obvious,
that it must be more tardy in the per-
formance of its functions. — In the pro-
cess of digestion; the stomach as we have
seen, exercises two functions, — First
— the secretion of a proper fluid, wherewith
to chymify the food; and second-
ly; — by its peristaltic, or grinding motion;
to mix that fluid with the food.

— Hence, we see, that in debility of
the organ, it is not only incapable of
furnishing the requisite amount of diges-
tive fluid; but also of exercising the me-
chanical force necessary, for the process
of chymification — Consequently, the in-
gesta being taken into the stomach, in
quantities too large, or of a quality compar-
atively indigestible; (for digestibility is only

a comparative turn) must remain unaltered
= ed, until decomposition takes place, and
gaseous ^{matters} are formed; which produce those
flatulent distentions of the stomach, and
acid eructations; of which mentioned has
been made when speaking of the symptoms
of the disease — The fluid secreted in
this irritable condition of the stomach
is of a vitiated nature, usually of a quan-
tity sufficient, for the digestive process, but
of an acrid and corroding quality; the pre-
-cise properties of which, have given rise to a
diversity of opinions among physiologists.

— I might here enter into a descrip-
-tion of the various pathological conditions
of the liver, and other organs, ~~dependent~~
upon this irritable condition of the stomach
and often producing jaundice &c &c but time

and since, forbid that I should say any
thing more, than to glance hastily over

— The treatment, necessary in
these affections, — First, then, we must
endeavour to remove the Cause, which can
be done, only by the observance of a few
general rules; and these relate chiefly to,
Diet and Exercise — a neglect of these
being the chief Cause of the disease.

— Such are the peculiar idiosyncrasies
of patients, that to fix any certain rule
for the regulation of diet, would be almost
impossible — I believe, it is conceded
by Physiologists, of the present day, that
animal food, is more readily digested than
vegetable; on account of its nearer approxima-
tion to the textures, which it is designed
to build up or repair — But on account of

=th stimulating properties, and the difficul-
=ty of restricting patients, to this diet;—it
is found practicable to use vegetable di-
=et in conjunction with it. — Of the flesh
most easily digested, I will mention that
of, venison, mutton, beef, squirrel, rabbit, Chi-
=ckens; and most wild fowls generally
used in the Culinary operations of our
Country — A small quantity of the lean
portion of any of these, may be taken during
the day, carefully avoiding meats or any
stimulating diet for supper. — On the
Contrary; the cured, or stale, meats as bacon,
sausages, fish both fresh, and preserved, pick-
=led oysters, cheese or stale butter; indeed al-
=most any substances, containing large
quantities of animal oil; should be reje-
=cted — As regards the bread, most proper

for the patient, we can say but little,
- While some recommend that, made of
the Indian Corn meal, others complain of
its readily fermenting in the stomach: so
that we must be governed, entirely by the
feelings of the patient- The best mode
of cooking this bread, I would say is by
baking in ashes, thus imbibing at the same
time a portion of alkali which will act
as an antacid in the stomach,

The bread made of rye meal, or ^{flour} wheat,
embolled, commonly called brown bread,
is, both on account of its agreeable flavor, and
by the mechanical influence, it exercises
on the bowels; a most excellent article of
diet- Neither of these however, should be
eaten, unless perfectly cooked, otherwise they
form a doughy mass, not readily penetrated

by the gastric fluid, consequently, producing unpleasant symptoms. — Fruits of all kinds, are found to disagree with most patients; and the seeds of apples, plums, grapes &c being almost wholly indigestible, should never be taken into the stomach.

Nor should the fruits, only in small quantities, and when well cooked, — They, should in no case, constitute an important article of diet; hence pies, custards, jellies &c should be rejected by the patient.

Eggs slightly cooked, have been much extolled as an article of diet; but even these, are found to disagree with some patients.

Sweet milk might also be mentioned in the same category, as these two, however, will probably be found to disagree, less frequently, than most any other articles of diet.

They answer a very valuable purpose as an article of lunch, or when it is found necessary, to take a few mouthful of food between the regular meals, to allay the growing sensation of the empty stomach,

One or two eggs slightly cooked, or even raw, may be stirred in a glass, with a little sugar, to which may be added, a small quantity of rich milk; is sufficient for this purpose. — The meals should be taken at regular periods of about six hours,

The breakfast should be light, for should the stomach, be overcharged in the morning; unpleasant symptoms are apt to follow during the day — Dinner, should be the most generous meal, but the Supper should always be very light; using no meats, — Many physicians recommend,

a little brandy, or a glass of generous wine,
immediately after dinner. — I have never
known any beneficial results, to follow this
course, and would therefore object to the
use, of wines or fermented liquors of every
description. Coffee and tea, as we have
seen, exert an efficient agency in the pro-
duction of this disease, hence they should
be rejected especially, by patients, of highly
nervous temperaments, — Tobacco
also, in any form, exercises a very harm-
ful influence on such patients; and
should by all means, be rejected.

The patient then, will natu-
rally inquire, what shall I drink, or
what shall I eat? My reply would
be that, a glass of good milk, or of
pure cold water, is rarely found to

disagree with any one; and as regards
solid food;— eat sparingly of whatever you
find to agree but with your stomachs;
making your repast of one dish, or of
as few, as circumstances, will permit;
for in a variety of dishes; you multiply
the temptations to indulge your appetite;
which in no case, should be carried
to satiety— Eat then just such a quan-
tity, as you find digests well; and no
more; and that you may stop at this,
it will be well for you, to take just
what you intend to eat, on your plate
and as soon as you have consumed it;
retire from the influence of further
temptation.

Sleep also, should be a mat-
ter of no little consideration, with those

who have become much enfeebled by long continued indigestion; but like other habits, when injudiciously indulged, is attended with very injurious consequences. — The habit, often indulged of lounging immediately after dinner; certainly exercises a very deleterious influence on the digestive process; for the stomach, as has been observed, like the other organs of the economy; requires, for the healthy performance of its functions, a certain amount of corporeal exercise; consequently whilst the body is in a state of repose, the digestive process, must be comparatively suspended. — But if from debility, or fatigue it become necessary, that the patient rest during the day, a half hour, or an hour; may be devoted to repose, immediately before

dinner, but never within two or three hours after a meal, — under more favourable circumstances; sleep should only be indulged in at night; and then, from six to eight hours of uninterrupted repose is generally amply sufficient,

More than this, should not be counselled in bed; for while this is necessary, to refresh, and invigorate, the system; more would serve to relax and enfeeble it,

Likewise The Bath is an excellent promoter of health, and should be applied, directly after rising in the morning. For this purpose, the linen should be taken off, or turned down from the neck, and shoulders, and these parts, together with the arms, should be rubbed well with cold water, or spirit,

perhaps, would be still better, is the shower bath; - to be followed by friction with a coarse towel; until the parts are perfectly dry. - This is a powerful agent in giving tone, and energy to the nervous system. The feet also may be plunged in cold water, every morning; and immediately dried, as the parts just mentioned,

This by its reactionary agency, invites the blood to the extremities, and thereby, prevents the coldness of feet, complained of by dyspeptics. Should the system be too feeble, for the shock produced by cold water, it may be made tepid at first, or applied only to a small surface; increasing the area at each successive bath.

The clothing should at all

times, be suited to the seasons, - care being taken, that it may be so light, as to subject the patient, to the injurious effects of sudden changes, in the atmosphere. This subject has elicited the expression of various opinions, among professional men, touching the propriety of wearing flannel next to the skin

On this point, we shall not venture an opinion, further than to suggest, that if worn at all; in order to insure its full benefits, it should be removed every night on retiring to bed, otherwise by becoming habitually accustomed to its use; - we lose in a great measure, the salutary influence, it was designed to exert by its friction upon the skin, as well as, its protection to that membrane,

Exercise—as has been observed, should be an object of paramount importance to the dyspeptic patient, and should be employed with the greatest prudence;—otherwise, instead of imparting vigor to the frame; it may debilitate it. It should be used moderately, and in the open air;—The most appropriate time for which is directly after meals,— Such is the influence of the mind upon the body, that to obtain the most salutary effects of exercise;— the mind, should be cheerful, and free from all cares;— otherwise, the result will be that, that, which was designed to impart vigor, and animation, becomes irksome and laborious,

For this reason, we would advise such vocations, as while they give ex-

exercise to the body, affords, also, recreation
to the mind. Such as hunting with
a gun, or spending a few hours in the
field with dogs; or if the patient be
sufficiently stout, light manual la=
bor by affording employment for the
mind; would be a very salu=
tary mode of exercising. — For
ladies; riding on horseback, or in an open
Carriage, or when circumstances, will
permit, a stroll into the fields, or frequent
ly walking among the flowers in the
garden; will have a very salutary tenden=
=cy.

The hygienic treatment being ~~now~~
given, I will now point out, as briefly
as possible, what remains to be said
in regard to, The Medical,

= Treatment, that may become ne-
-cessary in the course of the disease

First-then, we should endeavor to
Correct the torpid Condition of the bow-
-els, so as to produce regular uterine con-
-vulsions. For this purpose, we should
use such laxatives, as combine with their
Purgative properties; a tonic, influence also.

A combination of Rhubarb and Aloes
will be found to answer this purpose
admirably. The aloes, however, should not
be given, when there is tendency to hemor-
-rhoids, or uterine irritation.

To relieve the unpleasant symptoms, of
heart burn, and the grumbling sensation about
the stomach; recourse must be had to
Antacids;— the selection of which, will
depend, in a great measure, on the idiosyncrasy

= sis, of the patient — Those generally
used, are, the preparations of Ammonia,
sodae, Magnesia, and lime water,

= Of these Ammonia and sodae, are
preferable; but should never be admin-
istered when the stomach is empty;

for, besides their neutralizing properties;
they exercise, to some extent excitant, prop-
erties, which should never be done on the
empty stomach, — Small portions of Ep-

= sem salts, combined with equal quantities
of Carb. sodae, is almost a certain remedy
for the sick headache, with which dys-
pepsias, are so frequently annoyed.

In regard to Opies, I have
but to say, that they should be used
with the greatest caution, or instead of reliev-
ing the organ, to which they are directed;

they may wear out its excitability, and thereby prolong the debility, that they given to relieve. In cases, however, when the biliary organs have become involved, to any considerable extent; it will often be found necessary to employ a tonic, in combination with a cholagogue. For this purpose we may use an infusion, or tincture of wild cherry, yellow poplar, or dogwood, in which is incorporated a few grains of the Corrosive Chloride of Mercury. The infusion or tincture, is usually made of two or more of the above articles, in equal proportions, in a pint of which is dissolved ij or ij grs Cor. chl., Mercury. To be given in doses of a table-spoonful, after each meal; for two, three, or four days; *pro re nata*.

Ita Scriptura est. — Audite

- Thus gentlemen, do I submit, for your
consideration, several imperfect pages, on
a subject; the treatment of which
was summed up, by the learned Dr
Dudley in these few comprehensive words,

"Live on a penny, a day; and earn that;" and
anxiously do I await the fearful ordeal;
which by the imperfections of this treatise;
and by my own demerit; I shall return
to my relations, and friends, with reasonable
sorrow, dejected; or filled with the most
ecstatic joy - I shall be permitted, to
extend the hand of fellowship, to that
noble brotherhood, to which I have so long;
and ardently aspired -

Happy, thrice happy; if I but find accept-
- ance in thy sight.

C. W. B.