AN INaugural DISSERTATION
ON
Intermittent Fever

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY
OF THE
University of Nashville,
FOR THE DEGREE OF
Doctor OF Medicine.

BY
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OF
Tennessee

1856

W. T. Berry & Co.,
BOOKSELLERS AND STATIONERS,
Nashville, Tenn.
Dedicated to W.H. Bowling M.D.
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Medical Department.
In selecting a subject for my dissertation—I must confess that I have been somewhat puzzled. Not so much as regards the selection of one of which I could scribble something, but one that while I studied it would be of some advantage to me in after life. Intermittent fever is the subject I have thought proper to select—which though a simple disease still from its frequent occurrence and being confined to to no particular region should be well understood by every one of us—for each one will be often called upon to prescribe for it.

This disease commonly
called chill and fever has as to its cause long been a subject of contention among the knowing ones—and though for a long time all claimed to understand the treatment, but few attempted to trace back its origin to any certain cause; and those who did have signally failed for the plain reason that they dealt in supposition and theory instead of facts. Well could they tell the symptoms and from them determine the treatment indicated—but beyond this all was guesswork. But now I believe it is the generally received opinion that the sickness is a front—the primitive cause is
due to the injurious effects of Malaria, but as I do not wish to enter into an inquiry as to its cause I will endeavour to give the symptoms—pathology and a treatment which from my own limited observation together with what information I have been able to obtain from books and living physicians who seem to understand this disease has been found to be very beneficial in curing this disease. Too often called simple. Though Intermittent fever "per se" be but a slight affection, Still when we find it complicated with is often the case it is more difficult to be managed, and instead of yielding
readily to medicine hastens the victim to speedy death—And even when it be simple or uncomplicated it lays the foundation for many of our most serious chronic complaint—for this reason should it be checked as soon as possible—which by the use of but little medicine properly administered may be easily effected—and that bloom which has by degrees faded from the cheeks and whose thron is now occupied by a hollow pallor soon be returned to its wonted seat. This disease is divided into four stages Cold—Hot—Sweating—and Intermision in which the patient from all
outward appearances seems to be entirely clear of disease; but as the paroxysm returns at regular periods—which in each person may be different—we may expect the return of the cold stage. The patient feels himself weak and listless. He begins to yawn, gasp, and stretch. His mind is less active, and external senses seem more or less dull—very soon a sensation of coldness first along the back. He will complain of coldness before others who touch him can perceive it. Then he becomes really cold, the temperature falls perceptibly to others. The skin becomes rough. This is altogether a state of debility.
and consequently the pulse is weak and sometimes slow. The breath is generally short.

In the cold stage the blood has receded from the surface and probably from the small vessels so that it is accumulated in the large vessels of the interior.

After this the skin relaxes. It regains its warmth, colour and sensibility, and the pulse becomes quick and fuller. The heat, colour and sensibility of the skin go on increasing until they exceed their natural standard. The pulse grows full and very rapid. This is the hot stage or that of reactionary fever.
After which by degrees the skin becomes softer, grows moist and the moisture augments until at length the person is in a profuse sweat. After the sweating has continued for an indefinite time, which acting as a refrigerant by its continual evaporation sending a thousand degrees of heat latent causes the surface to become cooler and the pulse to grow gradually slower. The sweating and all other symptoms diminish. The appetite, which is generally absent in the three first stages now returns. And the patient is near as well as though nothing had happened. These are the leading symptoms and
I now will endeavour to note
the lesion produced upon the
System. First after the continu-
ance of the disease for some time
we can detect an enlargement of
the Spleen which may be observed
by feeling over the left
Hyposchondriac and lumbar regi-
ons; also a Sallow paleness of
the Skin. Now from the anat-
omy of the Spleen we can not
see what could it to become
so engorged unless the liver
fail to perform its office and
from the appearance of the Skin
we are only more sure that the liver
be torpid, and this from accu-
rate observation has been found
to be correct but as to the cause
of this torpidity we must acknowledge our indebtedness to chemistry for having pointed it out. When a chemical examination of the contents of the gall bladder of one who died of this disease be made there is found wanting Taurine, one of the fixed ingredients of healthy bile—a substance alkaline in its reaction. Then, as certain constituents of the bile are formed from the blood by the liver for the purpose apparently of being again absorbed at some part of the surface of the intestinal canal, and as Taurine is the only constituent of the bile found wanting—which upon close examination has been found to be
Chemically analogous to Taurine. Thus we see the lesion is that of a want and not of any active morbid process and these are the circumstances which render it likely that intermittent fever may be curable by the supply of that want.

As we have found that there is a want of Taurine which seems to be an active tonic or stimulant to the liver, to which conclusion we are forced to come by noticing that which follows its absence. First the liver ceases to act, becoming torpid, and the portal circulation is in part retarded which forces back to the spleen through the splenic vein the blood which if not obstructed by the torpidity of the liver would pass on to the heart. Thus we may account for the enlarged
condition of the spleen—and as the liver cease to perform its office colouring biliary particles, which it was the duty of the liver to eliminate from the blood, it permitted to pass on in the general circulation, and being deposited in the skin gives rise to the phenomenon of pallor—and to this torpidity may be also placed all of the symptoms of the disease—for standing as it does as a lock or dam to the portal circulation, and ceasing to act causing the portal system to become engorged—therefore retaining from the rest of the system the blood which should pass through it and at the same time receiving its due proportion—consequently there becomes from the diminished supply of blood
to the skin and extremities a collapse
of those parts which will account
for the cold stage— but as the portal
system becomes so much engorged by
its own elasticity and vital power endeav-
ouring to throw off this congestion for-
ce the blood through the liver and
then comes the reaction which is the
hot stage— and the system seeks its
equilibrium we have the sweating stage
and then the person is again well— no
not well but relieved until the portal
system becomes again congested which
seems to happen periodically. But while
the liver was too full we find the gall
bladder also to be filled with unhealthy
bile. Now this is the pathology of
the disease. Now are we to remedy
them, what are the indications to be met
First let us empty the gall bladder of its unhealthy contents. This can be most readily effected by administering an emetic which we all know by acting on the stomach setting it in motion, cleansing it and emptying it of its contents also causing the contraction of the abdominal muscles which so presses on the liver as to force out the contents of the gall sack. Then as we wish to arouse the action of the glandular system and more especially the liver, this we find to be most readily done with a mercurial purgative which is known to act directly on the liver stimulating it to active exertion.

By this we have filled the second indication, and now it still remains to fill other indications for we find
that the vital power are somewhat below their normal standard—and that the paroxysms are periodical—then we wish to administer both a tonic and an antiparoxysmic. Since the introduction of chincona and artime which is found to possess both of these properties—acting as a tonic and at the same time preventing the return of the paroxysm it soon becomes the generally adopted remedy. But now its use is superseded by Quinine a salt prepared from the bark of chincona which retains all the active principles of the bark—and which as I have before stated is found by chemical analysis to be very similar to the missing ingredients of the bile. Quinine then I think that as the original lesion...
was that of a want it may be cured by supplying that want which Quinine seems to accomplish—acting as a curative and not as some suppose as a prophylactic—and in all diseases it may be said that Quinine is used there is a failure in the secretion of bile—and the contrary of this will also hold good that in all cases in which there is a failure in the secretion of bile Quinine is found serviceable. Thus you see that we have fulfilled every indication in intermittent fever "per se" and as regards its complications they must be treated "pro re nata" meeting each indication that may arise by a case-flush diagnosis—and even after the return of the fcargorean is prevented
by the curative effects of the Quinine.
it may be even necessary to direct
your treatment to the reduction of
the spleen which by long enor-
gement may have become indurated.
Then from this you will see that
I believe that Quinine from the
effects that it exerts upon the
system, fills the place of Tansine
which by action of malaria has
been removed. Therefore as it
remedies the abnormal want acts
the part of a curative and that of
a prophylactic which means a
something that defends and
therefore to be a prophylactic.
we must consider each chill a
distinct disease disconnected with
the previous or following one
But this we find to be different—
for as long as Taurine is present
the patient is diseased—and
has what—might—be termed the
Malanious dysathasis—and this
may be supplied by Quinine Arsine
and several other therapeutical
agents—which are rather similar
to or by the actions of the secretions
of the alimentary canal converted
into Taurine.