AN INAUGURAL DISSERTATION
ON
Menstruation

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

BY
T.J. Manning

OF
Georgia

185
W. T. BERRY & CO.,
BOOKSELLERS AND STATIONERS,
NASHVILLE, TENN.
Menstruation

There is a striking difference between woman and man, not so much from their external configuration as from the function appertaining to reproduction, such as menstruation, giving suck and childbearing. When we consider the high office the female fulfills, the office of multiplying, which is so essential to the maintenance of our honored race, we do not think it strange that she should be provided with organs to cleanse herself, when in
an unimpregnated condition. The menses at the present day is considered by the best observers to be pure or nearly pure blood, the amount eliminated at each term is variously stated by different authors, but striking the balance between the two extremes it might be considered as from six to eight ounces each term. The amount of the menstrual flux is mostly dependent on the vital force of the economy. We do not have the discharge in young females before the year of pubescence neither are women troubled with it who has passed
the period of childbearing; it characterizes the female only when she is susceptible of becoming pregnant, after the menses cease to flow, she is no longer capable of bearing children. The age at which menstruation comes in this country is from the fourteenth to the fifteenth year, but there are variations from this period; some menstruating earlier others later; when it appears before the fourteenth year it is considered premature, and the other organs are not sufficiently developed to accomplish the great end for which they are designed;
when it is tardy and does not occur at the specified time, it is predicted to some mishap in the normal construction, and betokens the coming of future evil. The cleansing period or time of menstruation is considered as a general rule to last from three to five days; but as every woman has a law peculiar to herself, we may readily perceive that there must be great difference in different women, for one will menstruate a large amount in a comparatively short time.
while another will require a much longer time to menstruate a smaller quantity. The period, in which women are entirely free from the menstrual discharge, is very various in different habits and constitutions; the period of intermission as an average is from twenty three to twenty five days, but some are not clear of this wretched and pestilential drain more than the contracted period of eight or ten days. There is a question which has agitated the minds of obstetrical observers for many years, and this is whether
the catamenia be a secretion or not, but I think this has been satisfactorily settled by authors of modern date. I stated that the menses was pure or nearly pure blood, according to Prof. Meigs it is an impossibility to secrete blood, hence the discrepancy of opinion as to what vessel the menstrual fluid is elaborated from; the most plausible hypotheses, and cogent reasoning are decidedly in favor of its venous origin; and it seems to me not an extravagant idea that the catamenia might be cast forth.
from the tenuated basement structure of the capillaries. The analysis of the menses will convince any person who has fired into the recesses of physiology, that it is a fluid that cannot be secreted physiologically, therefore we conclude that it is an effusion, hemorrhage or something else aside from secretion. We come next to the cause of menstruation; this has been a theme of debate and research from the earliest ages of medical science, and the true cause was not elucidated until comparatively recent date.
it was by the never tiring zeal and unweaving energies of our most profound intellects, who adorn the medical profession, that this once almost mysterious subject has been correctly delineated by the intrepid polysearcher of these memorable benefactors.

The true cause of menstruation depends on the periodical expulsion of a mature ovum, this fact is yet in infancy, but it is one that will repulse every opinion that tends to its subversion.

As the expulsion of an ovum is the cause of menstruation we might infer in the
non-expulsion there would be no menstruation; yet a woman may have discharge of blood from the genitalia resembling the menses, and not ovulate. The womb is a vital organ possessed of the power of contractility and dilatability, and hemorrhage aside from menstruation is liable to occur and this should be carefully diagnosed, for a mistake in such a case might lead to serious consequences.

A woman commences ovulation at the puberis period, and continues to the age of forty-five years. Menstruation and ovulation are concomitant
or one is the sequence of the other. The ovum is matured periodically once a month. The periodicity of ovulation is not confined to the human, it stands prominent throughout the entire animal creation, but the interperiodical space is much longer in the inferior animals; the same immutable law is in force throughout the vegetable kingdom; the morning flower in its meridian splendor will eliminate its balmy odors for a while, then calmly nod its winning face to the chilling tornado, and rest in silent torpidity, until the
the genial sunbeams of spring bespeak it forth from its slumbering dome, and bid it resume its former splendor. During the intermenstrual period the ovum is gradually growing, but a few days anterior to menstruation it rapidly grows and matures itself. It slightly protrudes the membranous walls of the ovaries, which creates a slight afflux of blood to that point when the distended and tenuted membranes yield and give vent to the living ovum. This process is attended with pain in the sacrum, pubes and lumbar region which are relieved by
by the torrent of the menstrual flow. When the ovum is mature there is an excitement of the veins, arteries, and capillaries surrounding the ovarian follicle, yet this is not sufficient within itself to induce menstruation. It is dependent on an ovo-vital force which excites the somatic powers. The ever present nerves partake of the excitability and concentrate their dominant force on the uterus, and uterine appendages which solicit the womb vessels to gape and relieve themselves. Considering the delicate and complex apparatus from which
the meneser flow, the intimate alliance which each constituent part bears to the other, we can foresee the evil consequent on its derangement, a morbidie condition of one part will transmit its contagious incense to its fellow allies, then the grand source of health menstruation, will cease its well-being current, and the woman is involved in disease.

A student of Medicine let me be
When I from this College am freed
Success to him whose minds engaged
In pursuing the medical stage
An attention undivided and unrelaxed
Makes a doctor superior to quacks.