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THE

UNFETTERED CANADIAN.

VOL. 1. OCTOBER, 1850. NO. 10.

Part 1.--Original Communications.

AN ADDRESS ON MEDICAL REFORM, AND PHYSICAL EDUCATION.

BY PROF. O. DAVIS.

[Published by request of Convention.]

LADIES & GENTLEMEN:—

The year of our Lord, 1850, opens before us the pleasing prospect, that a Reform in the principles and practice of medicine, will be ultimately achieved.

The laborious researches and investigations of those who are ardently endeavoring to improve this science, necessarily render it in a transitive state, nobly careering onward in the line of progression.

The *rate* of *progress* we make, is characteristic of our day, and may be illustrated by the changes successively occurring in our native America. Unroll the scroll of Time, and there behold the startling fact inscribed, two centuries ago she was a vast wilderness. Silence and shadow reigned within the depths of her primeval forests. Beneath their leafy drapery, the eye of civilized man had never penetrated. Now peopled by millions, her

vast resources supply the world with blessings! In every direction, channels of communication unite her cities and villages. Steam connects her marts, transports her products, and in numberless ways contributes to her commercial greatness. Electricity, obliterating time and space, instantaneously telegraphs our thoughts where we wish them conveyed! In this ulitarian age, one discovery succeeds another, and shadows a successor, until we cease to wonder at our advance, and press on in the farther elucidation of science.

Opinions, too, change so frequently, that we now regard mutation as an organic law of progress. Our ratio of advancement is constantly augmenting, facilitated by the light and advantages of improvements. The intelligence of man seeks wider ranges for the understanding, and judges more accurately the subjects it investigates. Free inquiry is the boon of every independent thinker. While every science around us, is striding toward the ultimate point of progression, should we not be sensible of the feeble advances of the medical professsion? Should not the calamities of mankind stimulate our energies and facilitate our movements? *Dare* we *close* our eyes and ears to the woes and distresses of humanity, when we have accomplished so little for their alleviation!

Is it not *prima facie* evidence of our professional stupidity, to thus rest satisfied with our present condition? And does it not prove that the spirit of investigation is slumbering, when old and uncurrent ideas are offered as "regular" opinions? those which have had a legitimate succession, in a certain lineage! from time immemorial?

Methinks, truth is not partial to station, not begotten by medical sages nor parturated in Colleges, so that its heirship is restricted. Truth is the inheritance of every faithful and dutiful student of nature. She is accessible to every lover who diligently seeks after her; and she kindly invites him to drink freely from her exhaustless fount. With us, improvement and reformation are cheering words. They are harmonious with our spirit; our minds are attuned to the melody of progress; we greet the reseaches of the present, for in them are the elements of progression. Differences of opinion we tolerate. We would not hastily embrace a pretension, but carefully discriminate and gratefully receive the benefits resulting from the labors of those who are really benefactors of mankind. We would not array our opinions in opposition to those who think differently, thereby to create factions in the profession. Nevertheless, we would proclaim the

evidences of our senses, when satisfied of the improvements resulting from our investigations and practice.

As Reformers, we expect to meet the opposition of those who adhere to *old opinions;* some idolize the venerable past; time deifies her doctrines; with such, improvement and progress are irreverent innovations. The visions of the past, though distant and fading, are more certain to their sight, than the imagery of the future. True, the influences of the past are present, and will extend into the future, but to be modified, developed and perfected, in coming time. We would not limit nor restrain, but extend and give free scope to mind, scanning the past, improving the present and perfecting the future. We are denounced as Reformers, and derided for our temerity; and so were all the benefactors of our race who preceded us. We are furnished with this truthful, cheering evidence, that we are successfully laboring for the good of man; it encourages our hearts to continue our efforts. The opposition is weakening, though still bitter against us. It is not so widely diffused, but more concentrated and caustic. *We shall overcome* it by the power of truth, through the agency of a superior practice, whose demonstrations we know are convincing and conclusive.

Not long since, vegetable medicines were considered impotent remedies to decide in the fearful contest between disease and health. Now the heroic minerals are believed to be deadly agents, arbitrating in favor of dissolution. These are now less employed; their uncongeniality to the human constitution, is as well known now to the peasant as it was formerly to the chemist; sad experience taught them the *fatal* lesson, which their use occasions. Yet the practice yields reluctantly its missives of death, so long sanctified by use, and held sacred in the estimation of the learned. Permit me to remark, the ONLY HOPE of salvation for their Allopathic system of medicine is, to gradually and imperceptibly change its doctrines and practices, without exciting the suspicions of professional rivals. Ah, feeble effort to delude detection! Guilt is perceptible in their latest text works. He who doubts, look there and read. *Change*, in such instances, results from the pressure motive, from influences without and beyond their control.

The influence of Reformers is every where felt. Their principles are instilled into the best minds—the most independent thinkers in our country are indoctrinated with these opinions. The science verges on revolution. The older party are discomfited, and are yielding to the superior claims of

the younger. Infirm views, decrepid as age, which the current of time will soon sweep into oblivion, lean upon the staff of popularity for a momentary support. And here, vigorous as youth, fresh as the morn, powerful as truth, and progressive in investigation, we establish our College. We unfurl to the breeze and publish to the world our doctrines.

Allow me to allude to a distinguishing feature in our position which claims your especial attention. We frankly avow the purpose of our hearts, to contribute all our influence in favor of the physical education of man. What department of science needs cultivation more? and what has been improved less? What labors can elevate him more, morally and intellectually, and qualify him to discharge aright the duties, which result from those relations. Man, the compendium of creation—his influence is wide-spread; his duties are numerous, complicated and highly important. His relations are multipled; his interests are immortal, commencing at birth, reaching through time, and continuous as eternity.

True INTELLECTUAL SCIENCE is employed to elevate his thoughts—to strengthen his reason—to invigorate his mind. Thus it improves his understanding, and confers inestimable blessings on the race. It well nigh achieves an intellectual redemption, from the slavery of ignorance and midnight darkness of heathenism.

The vast importance of a *moral education*, engages the attention of the great men of every age. His moral nature *must* be educated. If that indwelling faculty of the human mind, spirituality, is rightly cultivated, it confers a moral and virtuous character—it leads to communion with heavenly objects—it elevates the affections, and purifies the heart. *Aye—it is the conservative principle of man's moral existence.*

But in the plan of education, has not the *physical condition* of *man*, received less attention, when estimated according according to its comparative value? And now, may not the clarion notes of truth be sounded, and re-echoed by humanity, and continue to reverberate, until man's physical being, shall prove the last remaining monument of the elevating, perfecting influence of education. Contemplate the causes which have operated so potently in the ruin of man's physical nature. Observe the universality of those deteriorating influences! behold congenital evils descending in the line of posterity, until vitality nearly ceases to control the forces of matter; and cannot the intelligence of the age devise some plan of secular education, which will ameliorate this woful condition?

One cause of this sad constitutional degeneracy, may be attributed to the educational and practical influences exerted by the medical profession We ask their forbearance if we state this conviction, for we would stand in the front rank, with those who use legitimate arguments, to maintain its respectability. We would laurel it with honors, for it has toiled unceasingly for the benefit of the race. But we would not close our senses to facts, nor lull our convictions in the conciousness of glory. Then, has it not, while endeavoring to assuage the woes of humanity, employed such remedies as are calculated to produce temporary relief, at the *expense* of permanent benefit? To me, it is a sad contemplation, that they have inculcated and strenuously advocated the use of those remedies, whose present effects are apparently beneficial, but whose ultimate influence is disastrous. We do not propose a discussion of this proposition, for the evidences of its truthfulness are everywhere furnished.

This, indeed, is somewhat explanatory of the reasons inducing us to engage our talents in the cause of Medical Reform,--at the same time advocating the expediency of the physical education of the masses. Vain would be the hope of accomplishing a physical renovation of man's nature. while unable to offer efficacious remedies, as substitutes for the depleting, destroying means now so popularly used for the cure of his diseases. We must labor, first to uproot these evils—invalidate their use,—to destroy that blind confidence which has so long reposed upon their imaginary merits.—In other remedies we find a greater congeniality to the constitution. We have those more virtuous and potent, which do not entail lasting, evil consequences.

But while we assert this, we are not unmindful of the fact, that if a correct knowledge of the functions of the organs of our bodies obtained with society, it would greatly diminish the demands upon the medical profession. So let it be. Let every intelligent member of community acquire a knowledge of the conditions of life and health in his own body, and the services of the medical profession will be seldom required. Then we do most earnestly commend to mankind the benefits which accrue from a proper physical education. We have witnessed with ecstatic pleasure, the introduction of Physiological works into our common schools. We have beheld with delight, the influence shed abroad upon community, through the instrumentality of the press.—But these means alone are inadequate for the accomplishment of so great and glorious an object. To add our moiety of influ-

ence to this good cause, we cheerfully open our doors for the medical and physical education of females, and thus prepare those, who have never heretofore been privileged with such advantages, to aid in this enterprise. This movement has been nobly seconded by their attendance.

And now, friends of improvement, if the miseries and anguish of spirit could be computed, which have been suffered by humanity, in consequence of a lack in knowledge of the immutable laws which govern our being, think you the letheon of indifference could longer stupify the senses of mankind? If we duly estimated the influence resulting from a proper physical education, our energies would not repose, until a scheme was conceived for the accomplishment of this object. Such a scheme is ours,—prolific with good to mankind.

We again assert, this kind of education is correlative with every moral enterprise. It is a vain thing to project the moral elevation of man, and neglect his physical cultivation. There is such an inter-relation existing between body and mind, that the one is capable of improvement, only as the other is qualified to sustain it. Impaired constitutions and disease enfeeble the intellect, debase the mind, pervert the moral perceptions, and give the whole man a natural downward tendency, not easily arrested. It incapacitates him for the proper appreciation of moral truths. Physical education is, then, a powerful auxiliary to aid in redeeming man from the bondage of error and tendency to vice. *It is the key to the Arcana of Life.* It is destined to exert an abiding influence, in unshackling him from the trammels of perverted senses, and debasing, destroying, blighting practices, which sink him low in the slough of degradation,—and to re-instate him in that physical condition which is more in accordance with Nature. When thus physically improved, truth has a potent sway over him, and tells on his present and future destiny. When his physical powers are rightly developed, then can truth achieve a moral and intellectual triumph, because fountains of vice and streams of misery would be dried up, and moral avenues open for the communication of divine influences. *How sublime would be such an achievement!*

It is a sublime spectacle to behold the towering mountain, whose top peers its lofty crest amid the clouds of heaven! It is grand to view the mighty cataract, whose torrent is impetuously rolled, with its thunders, into the abyss beneath, and then raises its meek and vapory incense to Him whose majesty is here shadowed forth! Sublimity and grandeur fill our

minds when we look above us, and there behold world after world, wheeling in immensity,—there to remain, until the cycle of Time shall be interdicted by the fiat of the Omnipotent! But how much more *grandeur* and *sublimity*, in the triumph of immutable Truth, as it sits enthroned upon the heart of humanity! Man the object, whose physical renovation is the prelude to that final triumph of truth, which must ultimately complete his happiness, in the bliss of heaven.

What nobler mission is there, than to reveal to the understanding, the wonderful laws of the human constitution, on which depend life, health, and happiness? They are the indwelling manifestations of the will of our Creator, concerning our physical being, the observance of which confers natural blessings. God dispenses life, health, and disease, in exact accordance with these laws. Obedience to them ensures health, happiness and continuance of life,—while ignorance and disobedience results in misery and death. His will concerning our physical existence, is expressed in our constitutions. It is *inwrought* with our existence. If we would obey his will, and escape the penalties attached to the violation of physical laws, we must first acquaint ourselves with those laws. They are comprehensible. They are rational,—as are all his revelations. The designs and laws which he has established in man's constitution, are not more obscure thon those which regulate the natural world. "In Him we live, and move, and have our being," and are happy. Out of Him, we consume and are miserable. If we grossly violate the laws of nature, which are of Divine origin, the measure of retribution will be in exact accordance.

God invites his intelligent creatures to become wise, and co-operate in the fulfilment of his designs. Conformity to his will, will result in happiness. To act in harmony with it will promote enjoyment, because those laws are wisely adapted to our present condition. If we render our physical natures in obedience to God, how great the manifold blessings! Then will our intellects be strengthened to comprehend His wisdom, and His moral nature. Then will we be better prepared for the reception of Divine influences. Then will the END of man's existence here be attained, which is the Glory of God,—"Glorifying Him in both body and spirit, which are His."

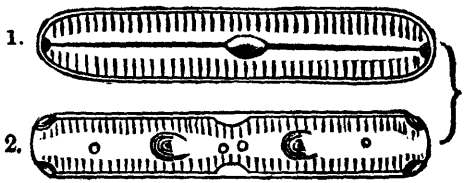
ANIMALCULES, THEIR NATURE, DISTRIBUTION AND INFLUENCE.

BY PROF. A. K. EATON.

[CONTINUED]

Two stomachs only were visible in the particular specimen under examation, yet it must not be supposed that the *navicula viridis* is limited to *two* of these organs. In other specimens, many are discoverable, and from their variation in number, size and position, their sudden appearance and disappearance, and apparent isolation from each other, many observers have hesitated to pronounce them stomachs.

The following engravings exhibit the general form of this species of *navicula*, and some of the organs referred to:



In the first engraving the upper surface of the *N. viridis* is represented. No correct idea of the beauty of this animalcule can be gathered from a mere outline, destitute of the rich color and delicate shading of the living specimen. The cut more nearly represents the appearance of the *fossil*, than the living viridis.

In the second figure, the side or edge of this animalcule is exhibited. Each side of the centre, the sexual glands are represented in the form of large globular organisms, whilst the smaller circles at the centre and near each extremity in the figure, represent the stomachs referred to. Animated discussions have arisen among microscopists, with reference to the true nature and office of these little *sacs*. Ehrenberg, who has unquestionably devoted more time to the study of animalcules than any other individual, pronounces them stomachs, and his conclusions are based upon observations made whilst these organs were filled with coloring matter. Certain coloring substance of vegetable origin, such as *indigo* and *carmine*, when diffused through water containing the N. viridis, are taken into the stomachs of this animalcule, and thus the form and action of these organs are rendered

plainly discernible. From the fact that these globule vesicles become immediately colored, whilst the other parts of the animalculite remained unchanged, Ehrenberg inferred that they performed the office of stomachs. They had previously been considered by naturalists as *ova*, and some yet claim that the mobility of these vesicles, and the absence of a connecting canal refute the theory of Ehrenberg, with reference to their character and office. Dr. E,, however, asserts that in some species he has discovered a tube or canal connecting the different stomachs. He also states that he has distinctly seen the particles of coloring matter pass through these canals. There are other plausible theories to account for the presence and action of these sacs, but a discussion of them would not be profitable at present, therefore I return to the N. viridis and its associates.

The engraving, as I before intimated, exhibits the marking of the *skeleton* of the animalcule rather than its exact appearance when living. Our knowledge of the structure of this and other animalcular forms, depends in a great measure upon the observations made upon fossil specimens: therefore, I may be allowed to direct the attention of the reader briefly to the distribution of *fossil infusoria.**

Vast earthy deposits occur in various lacalities in all parts of the world, that are made up entirely of the skeletons of infusoria. These are found in the ancient beds of lakes, ponds and marshes, and similar deposits are continually being formed in bodies of water now existing. They are produced by the rapid destruction of animalcular life. The skeletons or shields being composed of hard mineral substances, such as silica, lime, and oxide of iron, do not readily suffer decomposition, but, after the death of the animalcule and disappearance of the decomposible part, retain their original form for ages.

Thus many a fertile plain or quiet vale, over which once rolled the waters of lake or sea, is one vast charnel house,—"one grand mausoleum to the *mite*-y dead." Thus, whilst man's proudest monuments decay, and crumble into dust, nature has reared many a proud memorial to the beauty and elegance of those creatures of the invisible world, that once sported in our waters, but are now unknown except in that history which is written as with a "pen of iron" upon the rocky page of the vast volume of the Earth.

The polishing slate, found at Bilin, Germany, made up entirely of infuso-

* The term *infusoria* is appled to animalcules generally, since from their abundance, they form a kind of *infusion* in water.

rial skeletons, is remarkable for its thickness and superficial extent. Spread over an area of several square miles, and extending to the depth of 14 feet it furnishes an astonishing history of the myriads of minute creatures, inhabiting the waters that once stood above their present resting place. The minuteness of these skeletons almost exceeds belief. One cubic inch of this deposit contains 41,000,000,000 shields, and of these, 187,000,000 would not outweigh a grain of sand. The *berg-mehl* or *mountain meal*, found in Tuscany, is a vast infusorial deposit of great thickness and extent, and even many solid rock formations—some remarkable for hardness and beauty, especially flints and semi-opals,—prove to be of animalcular origin.

These infusorial deposits are not always made up entirely of shields of extinct species; many of the skeletons from these ancient deposits, correspond exactly with the form of living animalcules, and wherever the waters of any lake or marsh contain those animalcules, there we find deposits continually forming, similar to those of more ancient origin before described. Thus, deposits occur in the present ponds and lakes of Maine, Massachusetts, Connecticut, Vermont, New York, and doubtless every State and almost every county, in the United States. The ingenuity of man has turned these accumulations to good account. Most of these shields being silica, finely divided, they furnish a harder and finer polishing substance than could possibly be produced from silica by mechanical means. The different varieties of *tripoli* are from different deposits of fossil infusoria.

To return to the animalcular contents of a water drop; the species of navicula previously described is perhaps one of the most beautiful of the class, yet there are others that are scarcely less interesting. No less than six different species were discoverable in the water under examination. Besides the different varieties of navicula, other forms were visible, that were by no means as harmless or quiet as the former. It would be difficult indeed to answer the question so often propounded, "how many animalcules inhabit a drop of water?" Ehrenberg estimates that 500,000,000 sometimes exist in a single drop. Certainly they might exist to such numbers, and yet each individual would have, comparatively speaking, as much sea room as a sperm whale in the Pacific.

One of the rarer and more graceful animalcules, which, in the case referred to, were revealed by the microscope, is termed *navicula spencerii*.*

* Receiving its specific name from that of the celebrated optician, C. A. Spencer, of Canastota, N. Y., who, by his devotions to science in its application to his favorite art, has succeded in producing microscopes second to none in the world. By means of one of these he was enabled to detect lines in this animalcule, that had not previously been discovered by microscopists.

Its general form is represented in figure 3: The markings of the fossil

3 

form of this animalculite, are very delicate, and only exhibited by the best microscopes. The cross striæ represented by dotted lines, appear under glasses of moderate power, like continuous lines.

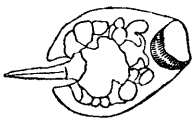
4 

Figure 4 represents another of the ordinary inhabitants of spring water. This creature moves swiftly about from point to point, evidently engaged in securing food. The tail at the point seems to be provided with a cup, from which the animalcule has the power of withdrawing the air, and thus by atmospheric pressure, fastening himself to any point. When making use of this peculiar mode of attachment, he moves rapidly about within his confined limits, describing a circle, having the point of attachment for its centre. The name of this animalcule is *metopidia lepadella.*

(To be continued.)

CARDITIS, HYPERTROPHY & DILATATION OF THE HEART.

BY S. M. DAVIS, M. D.

A Mr. Neale, of Buffalo, of sanguine and nervous temperament, aged 42 years, had occasionally experienced slight rheumatic pains in the chest for fourteen years. Six years ago he had a slight attack of *carditis*, (inflammation of the heart,) which left him with considerable palpitation. Four years since, the cardial inflammation was renewed. When I was called to prescribe for him, he had been under Allopathic treatment two or three weeks. Venesection, cupping, leeching and blistering, besides other antiphlogistic means, had been employed, but without any benefit. On examination by immediate auscultation, (to listen with the ear,) the endocardial murmur clearly indicated the existence of *endocarditis*, (inflammation *within* the heart.) I prescribed mild opening medicines, (Beach's Neutralizing Physic,) and a fever powder every two hours, combined with anodynes, and directed a low vegetable diet. In a few days he recovered so as to be able to attend to his business; but he did not entirely recover from the effects

of this attack. Palpitation and suffocative breathing was sure to follow active exercise or violent excitement.

Persons who have been affected with inflammation of the structure of the heart, which has left it in a permanently damaged condition, are constantly liable to new accessions of inflammation, not only with recurrence of rheumatism, but from exposure to cold, intemperate indulgences, or some unusual bodily effort. Violent fits of passion are almost sure to excite a recurrence of the disease. In such instances, the diagnosis is less easy and certain than in primary cases. The physical signs, which are our chief reliance in previous cases, now fail to afford much precise information.

In the *first* inflammation of the pericardium, (serous membrane surrounding the heart,) there is the *exocardial murmur* made by the moving of the roughened surfaces upon each other. But in after inflammation of the pericardium there is no exocardial murmur if the surfaces adhere completely. If they adhere partially, and there be a murmur, it will not have the proper attrition in it, and so will want the exocardial character. In the first inflammation of the endocardium, there is the endocardial murmur made by the recent lymph deposited upon a valve, and the murmur continues ever afterwards, when the valve so far falls short of perfect reparation as to remain thickened. There is the permanent murmur of the old unsoundness, and the recent murmur of the new disease; but how much is due to the old, and how much is due to the new, is too complicated for even a nice ear to discriminate.

Great discrimination is requisite to determine the pathological condition of the various parts of the organ affected. The signs denoting the presence of renewed inflammation are not always unequivocal in cases of lesser intensity, and sometimes in more severe, and even fatal cases. For its recognition we are to take into consideration its frequent coincidence, and accompaniments. Experience declares, that, when the heart has, by a prior inflammation, been left permanently impaired, attacks of rheumatism, pleuritis, or even fever, are apt to renew it afresh. In every fresh attack, the palpitation is greatly augmented, and a general uneasiness and pain in the cardial region indicates an inflamed condition.

The person above alluded to experienced most of the above symptoms. After frequent attacks, the case became alarming, and I admonished him of his approaching fate. Sudden or violent impressions upon the nervous system, or quick physical exercise, would bring on cough, great dyspnœa,

(difficulty of breathing,) and violent palpitation. At this stage of the disease, the signs by auscultation were unequivocal. The systole motion (contraction of the heart) was violent and confused. The apex rested on the diaphragm, producing strong pulsation in the epigastrium. The endocardial murmur imperfect and confused. The tricuspid and mitral valves continued to perform their functions. The aortic valves did not prevent the return of the blood at each diastole motion, (dilatation of the heart.) This condition caused great pulmonary congestion, and in the latter part of his illness frequent attacks of hæmoptysis, (spitting of blood,) attended with a distressed, hacking cough, great oppression at the præcordia, (front part of the chest,) and laborious respiration. The extremities were ædematous, and not much emaciation of the body generally. He was sitting up, conversing with his friends as usual, when in a moment he was lifeless, without a struggle.

Autopsical appearances.—Enormous hypertrophy (increase of size,) and dilatation of the heart. Its length was eight and a half inches, and its width five and a quarter inches. Its cavities would hold, when distended, one quart of fluid: the apex rested on the diaphragm: extensive adhesions of the pericardium. The ascending, transverse, and descending portions of the arch of the aorta were ossified, and enlarged to two inches in diameter. The aortic valves were not ossified, but were much too small to prevent rapid regurgitation at every diastole motion. The whole structure of the heart exhibited signs of inflammation and organic lesion. Lungs greatly congested.

Prophylactic (or preventive) Treatment.—Avoid excesses of every description, particularly indulgence in the use of alcoholic stimuli, and great mental emotions,—also violent physical exercise,—as they all tend to overtax the power of the heart, and endanger distention, enlargement, organic lesion and inflammation. Avoid sedentary habits, and high seasoned and stimulating diet. Plain, simple diet, cheerful exercises and innocent amusements, are proper. Direct the mind from dwelling on the disease. Give all suitable encouragement.

Therapeutic Treatment.—Remove any acute disease, such as rheumatism, pleuritis, fever, &c., by proper treatment. Any suppressed secretion or evacuation should be promoted by mild means. Bathing, friction, quietude and anodynes to reduce excitement.

Buffalo, October 28, 1850.

CONVULSIONS.

FROM WM. H. COOK, M. D.

Friend HADLEY:—I send you the following case, as copied from my Journal. Take it for what it is worth.

August 2nd. This evening was called to see Mrs. D.,—æ. 30. On arriving found her in a fit: Insensible, eyes open and fixed, grinding the teeth, spasmodic twitching of the hands, arms and legs; palms of the hands and soles of the feet warm, with the rest of the extremities *very cold;* pulse imperceptible. The fit passed off in a few minutes, leaving her perfectly sensible. Pulse now 54, *very* small and weak. Complained of having a severe darting pain in the head, and right side. Swelling over the region of the liver and stomach. Palms of the hands and soles of the feet now cold. Skin loose and flabby. The fits come on without warning, and usually last about ten minutes. An Allopathic physician had been attending her for five days, but she grew worse every day. Had had fifty-one during the twenty four hours previous to my being called.

On examination, I found nephritic torpor, hepatic torpor and congestion, prostrate nervous system, and consequently weak circulation. A strong tendency to general *internal* congestion, and a considerable collection of gas in the stomach.

Treatment.—1st. Gave a single dose of

Spts Nitre dulcis,
Ess. Mentha viridis, (spearmint,) *aa* 10 drops.

This produced micturition in a short time.

2nd. Applied cloths wet in *warm* water over the stomach and liver. In one hour there was no pain. In two hours gas and swelling all gone. Discontinued the cloths.

3rd. At the same time began giving infusion of

Asclepias tuberosa, (white root,)	8 parts.
Capsicum annum, (cayenne,)	1 "

A table spoonful every hour. This roused the lagging circulation, and relieved the internal organs, by determining the blood to the skin.

4th.

Lobelia inf. sem., (lobelia seed,)	2 parts.
Podophyllum pelt., (mandrake,)	1 "
Potassæ bitart, (cream tartar,)	1 " M.

Three grains every three hours. This stimulated the liver to action, and kept up the action of the kidneys already begun by No. 1.

The patient had one fit shortly after my arrival, and slept soundly most of the remaining part of the night.

Aug. 4. Mrs. D. continued the use of No.'s 3 and 4 up to this morning. Had *two* fits yesterday, and slept well last night. Was sitting up this morning, and *wanted* to go to work. Pulse natural, and everything right. Discharged cured.

Oct. 8. Mrs. D. continues in good health, and has no more convulsive symptoms.

Summer Hill, Oct. 12, 1850.

Part 2,--Selections.

DISCOVERY OF VIRTUES OF THE DRAGON'S-BLOOD.

(A PLANT OF THE DOCK FAMILY.)

BY M. LOUIS DESCHAMPS.

About the year 1830, I received from France several boxes of plants; it happened accidentallly that there was a seed of the dragon's-blood, (Lapatham Sanguineum) in the soil around them. The plant had been known to me from childhood, as an excellent remedy in cases of cuts. I took the greatest care of it, and prized it exceedingly. In 1832, I received a severe contused cut in the hand, which bled profusely. I suffered extreme pain. The thought then struck me, to apply the dragon's-blood to check the hemorrhage, and reunite the paris. I was astonished to find that as soon as I applied it, the pain disappeared; in a few hours the contusion was no longer visible, the lips of the wounds appeared to be perfectly united, and only to require time to render their adhesion secure and permanent. A fact once observed, rarely disappears from my memory, and that which I am about to relate, is of somewhat more recent date than the preceding. Some time after the occurrence just narrated, while on a party of pleasure in the country, my knee-pan was pierced by a thorn. I felt but a little dull pain, at the time, which did not check my activity, but as soon as I went to bed I experienced the most acute suffering. I applied poultices all night, without deriving from them the least possible relief, my leg was drawn up and became very much swollen. Being unable to sleep, I had time to consider

what I could find to alleviate the pain. If I had then known the virtues of my panacea, I should have used it successfully; though perhaps its effects would not have been so speedy as those produced by the dragon's blood, as the injury was merely a local one. I recollected the effects produced by the dragon's-blood on my former contusion; and as soon as day broke, I obtained a large number of leaves, which I applied, after bruising them, to the swollen part of my knee. With the first application, the pain ceased; I was able to stretch out my leg, and walk immediately. After having walked all day, my knee was entirely well. How long the thorn remained in my knee, I cannot say, but I often felt it there long afterwards, without experiencing any inconvenience from its presence.

One of my friends received a severe contusion on some varicose veins which he had in the leg, and suffered severe pain in consequence. He applied a strong compress of dragon's blood leaves, and was able, immediately afterwards, to walk without difficulty. In the space of four hours every trace of the contusion had disappeared, and the limb resumed its original condition. The pain which he had frequently suffered from the varicose veins, entirely subsided, and the limb became stronger than it had usually been. Afterwards, when he felt any weakness produced by the varicose veins, he adopted the same remedy, with the same beneficial results.

One day, while out walking, I accidentally sprained my foot. I returned home at 2 o'clock in the afternoon, unable to walk. I suffered greatly; my foot was much swollen; I applied a strong poultice of dragon's-blood leaves, and was able to walk about all the afternoon. In the evening my foot was quite well.

Pursuing experiment after experiment, I cured by the aid of this plant various kinds of ailments, and hence I concluded that the same result would follow in all kinds of spontaneous external injuries. I applied it to cure the stings of venomous plants and insects, with uniform success. The pain caused by burns was immediately relieved by its application. I have never had an opporiunity of using it in very large burns, or at least, if so, I have forgotten it; but I think its effects would be the same, and their rapidity would be proportioned to the severity of the case.

I have tried it in spontaneous rheumatic affections, in external irritations and in swellings, always with the same success. In cases where a thorn or splinter, or other extraneous body has entered the flesh, the application of the dragon's-blood prevents any serious consequences.

I was at the time of these occurrences on terms of intimacy with the principal physicians of the neighborhood; to them I communicated the virtues which I had observed in this plant, and urged them to use it in the hospitals of which many of them were directors, giving them at the same time as many of the leaves as my garden would supply. They almost all treated the proposition with ridicule, and told me that any other plant would have effected the same results. Two, however, promised by way of complaisance, to use it, but never did so.

However, I met with a physician of good sense, a true philosopher, and a man possessed of various rare professional attainments. All his limbs had been paralyzed for twenty years, yet he still continued to practice medicine,

and enjoyed a high reputation for the cure of certain complaints. He made his calls in his carriage, his servants carried him to the patient's bedside. There was still enough strength in his hands to enable him to feel the pulse and write a prescription. I advised him to make use of the dragon's-blood, after giving him the details of the results which I had obtained from its application. He replied, "I have thus far availed myself of all the resources of our art, without having experienced the least alleviation of my sufferings. Since then, I have had recourse to what are called 'old women's remedies,' which are sometimes better than those which our profession prescribes, but still I derive no benefit from them. Our art is yet in its infancy, and I fear that we have entered on a wrong career, which it will be difficult to abandon. The science of medicine should be simplified as much as possible, while we do the reverse. Society, in vesting us with so great a privilege, without holding us responsible for its exercise, has been blind to its most sacred interests. It has said to us, 'Let medicine be a progressive science, but at the same time you must live by your profession,' two conditions which are entirely incompatible with each other; for by the term 'live' we understand, at the present day, 'make a fortune as rapidly as possible.' Progress in medicine is the extension of disease, and this is the curse of those who practise the profession.

"Medicine would long since have been on the high road to perfection, if society had imposed on the physician conditions directly the reverse of those which now exist. His fortune would then be derived not from the number of the sick, but from the number of the healthy. Important results would have arisen from the view of the duties of the physician. In the first, there would have been an end of that spirit of rivalry, which prompts every professor of the healing art to present himself to the community as the Hippocrates of the era, to the prejudice of his brethren, whom he too frequently stigmatizes as ignorant pretenders. A continual state of discord prevails, where nothing but harmony ought to exist. Had we desired the progress of our art, we should have sought and found the means of advancing it. At present, the success of a physician rarely depends on his talent, but usually on the appearance he is able to make in the world. Polished manners, a fine carriage, and an introduction to the principal families in the neighborhood, are frequently found sufficient to establish a reputation as the first physician of the place. In a science where quackery is a means of success, artful deception is the great desideratum. The medical faculty of Paris, which is regarded as the most enlightened in the world, justifies my assertion in granting diplomas as health officers to men who are allowed to dispense with all study, and who yet practise medicine throughout France to the same extent as regular physicians, universally receiving the title of doctor, and being invested with the regular credentials of that rank.

"Surgery is a science which I revere, and in which great improvements have been made. It is nevertheless a science in which all who practise it should be held responsible for the result of their operations. Yet how often do we meet with persons who have sustained irremediable injuries from the

ignorance of their surgeons. The immense influence exercised by professional men over the minds of the people, might be productive of the most beneficial results, if it were only exerted on behalf of the cause of humanity. In their eyes we belong to a supernatural order of beings, who penetrate the most occult science of nature: hence we are every moment overpowered with the most extravagant questions, which too many of us make no scruple in answering with the most confident assurance. The love of the marvelous is deeply implanted in the human mind. Man prefers that which he cannot understand, and which is shrouded in mystery. When will poor humanity reflect with its own brain, and not with that of others! That simple, sterling good sense which is our safest guide, is almost universally neglected. That custom of believing without investigation, converts us into mere machines, and renders the present era unworthy of the name of a civilized age.

"Medical science, in my opinion, made a retrograde movement in substituting mineral for vegetable remedies. It is true that we have increased the business of the druggist: and we had something at stake in doing so, for vegetable medicine was becoming so popular and simple as to interfere with our ministrations. But we have thus abandoned the true course pointed out by nature. Our art has diverged from the path of progress. We had a vast and limitless field to explore. Often does the proper remedy lie at our very hand, while we remain ignorant of its existence. I am persuaded that as soon as we seriously investigate the medicinal properties of the vegetable world, and publish to the world the result of our researches, every man will become his own physician. I am convinced that there is a very prompt method for attaining this end, and advancing with a giant's pace the progress of the healing art. Let all nations unite in collecting from their domains all the vulgar medical remedies in vogue, which almost always consist of vegetables. Let these be fairly and conscientiously tested; and in cases where peculiar medical recipes exist, the knowlegge of which is confined to certain families, if these are found efficacious, let the secret be purchased, no matter at what price. Thus the most uncultivated tribes might furnish us, perhaps, with the most valuable discoveries."

Such were my friend's observations. I told him that I agreed with the opinions which he had expressed,—that I had witnessed among savage tribes the application of certain plants, which effected wonderful cures,—that I believed the virtues of the dragon's-blood to have been well known to the Gauls,—that we had in France a multitude of plants of rare virtues, but which had been long entirely neglected. The plantain, for example, is a remedy which I have always seen prove effectual in external wounds. Its application is extremely simple. It is only necessary to take the leaves, beat them between the hands, and apply them to the wound, so that they may come in close contact with it. Several leaves can be placed one over another, and they may then be frequently changed, especially when the suppuration is very profuse, which is generally the case at first, though it gradually diminishes until the wound is entirely closed. When the wound is very deep, the leaves may be crushed, and the juice must be introduced until the leaves can be applied. If these cannot be obtained, the root must

be substituted. This plant would probably produce very beneficial effects in various internal disorders.

My philosophical friend told me that he would experiment on himself with the leaves of the dragon's-blood. I gave him all that I had. He came to me some days afterwards, to congratulate me on the effects which it had produced. He said that there was much more motion in his arms, that he was stronger, and that he had never felt better since he was paralyzed. He added that he intended to make a general application of it over the whole body, but that he required a further supply of leaves for that purpose. I gave him some plants, and also some seed that he might cultivate it himself in sufficient quantity. Since that time I have not seen my medical friend, but a short time afterwards, one of my intimate acquaintances called on me, and on my asking him what news he had to tell me, he informed me that he was going to see our medical philosopher,—that he found him very ill, and that for three days past he had experienced the most acute suffering, which allowed him not a moment's repose; that his servants in carrying him to see one of his patients, had let him fall on his vertebral column, that he had tried all sorts of remedies, without deriving benefit from any, but, on the contrary, that they seemed rather to increase the pain. I inquired if he had tried the dragon's-blood, and on receiving a reply in the negative, I immediately requested my friend to take him a supply, which he did. The leaves were slightly crushed; a bed of them was made for him—the doctor fell into a sound sleep, and awoke entirely recovered.

A lady of my acquaintance had the misfortune to break her leg. The surgeons set it as soon as the clothing was removed. She felt, as is always the case after a fracture, severe pain, great irritation, general weakness and considerable inflammation. I desired her, without the knowledge of her doctors, to try an application of the leaves of the dragon's-blood, which she did, and immediately experienced its beneficial effects. The pain and irritation disappeared, and in a very short time she was able to use the limb, though it had been severely fractured.

The doctors congratulated themselves on so speedy a cure, especially in a subject of her age, (55 years,) but they were not informed that their prescriptions had not been implicitly followed.

I communicated in 1848, to M. de la Morissier, (then minister of war, and charged with the colonization of Algiers,) the fact that the progress of the colony depended greatly on the culture of maize, and in its general use, which was neglected from ignorance of the immense advantages which the colonists would derive from it. I proposed to furnish them with all the necessary means for attaining this end. At the same time, I gave him three cases of dragon's,blood seed. I said that it was my opinion that this plant, in the climate of Algeria, would develope the same virtues which I had found it to possess in others—that it would be of essential service to the colonists, being always at hand. [It is very easy of cultivation, being sown in a moist soil, and transplanted in almost any soil as soon as it has four leaves, with an interval of about a foot between every two plants. The plant, when once transplanted, is very robust and hardy.] That it would

be especially valuable to men living in a strange climate, where they would experience a thousand annoyances produced frequently by trifles, but which yet might deprive them, sometimes for a long period, of the use of their limbs. Bruises, contusions, splinters, stings from venomous plants or insects, burns, sprains, spontaneous sickness, inflammation—that of the eyes for instance, and all sorts of exterior irritations, would be almost immediately cured by the prompt application of the crushed leaves of the plant, or, if these could not be obtained, the root might be substituted. A quantity of the crushed petioles might be put in alcohol for use during the winter, and though the virtues of the plant would not then probably be so active, the preparation would yet prove very valuable.

The Minister of War listened to my remarks with a complaisance which was nothing more than formal politeness, and which induces me to believe that my dragon's-blood seed is still in the Bureau of Colonization, unless indeed it has been thrown into the gutter.

POST-MORTEM EXAMINATION OF THE Rev. JOHN NEWLAND MAFFITT, WHO DIED FROM FATTY DEGENERATION, ULCERATION AND RUPTURE OF THE HEART.

BY JOSIAH C. NOTT, M. D., MOBILE.

The subject of this case occupied a large share of public attention for many years, and was a man of no ordinary ability or attainment. The case itself is full of interest and instruction to the medical inquirer, and for this reason alone would well merit a page in a medical journal; but there are other and weighty considerations which induce me to place it on record.

The fact is notorious that this gentleman had been arraigned before his church, at the North, to answer charges deeply implicating his character, and which had caused great mortification and distress to his family and friends. He arrived at Mobile about two months ago, and immediately commenced the exercise of his sacred avocations. Immense crowds were attracted day after day by his extraordinary pulpit eloquence. When at the zenith of his success, evil reports pursued him—articles, derogatory to his character, were re-published in Mobile from the New York Police Journal, considerable excitement in the town followed, and parties were arrayed for and against him. He became very much excited himself—was much occupied in writing for several days and nights—in writing was suddenly taken ill on the evening of the 27th of May, and died in about seven hours, aged 56 years.

Suspicions of suicide by poison, were soon bruited over the town, and some of those friends who had proved true to him through all his heavy trials and afflictions, still confident in his purity and innocence, and fully

aware of the confirmation which this charge would add in the eyes of many to the grave accusations already urged, demanded a post mortem examination, which I made at their request.

Mr. Maffit, at the time of his death, was staying with a friend about three miles from the town, and when taken ill, a young friend of mine, Dr. E. P. Gaines, a well educated and intelligent practitioner, then in the neighborhood, was called to his assistance, and has kindly furnished me the following note of the case. The doctor had had no acquaintance with the patient before, nor had I ever seen him previous to the post mortem.

"Monday, May, 27th, 1850, between the honrs of 7 and 8 o'clock, in the evening, I was called to see the Rev. John Newland Maffitt. Found him in great pain, which he referred to the inferior sternal region. Suspecting immediately an affection of the heart, I questioned him if he ever had any pain in his heart before. He answered that he had had on several previous occasions some slight pain in his left side, with a slight palpitation, but not of much moment. Auscultation detected no abonrmal sounds, no palpitation, but the heart beat regular and slow.

"He belched up great quantities of wind, but there was no distension of the epigastrium, or tenderness. He vomited occasionally, undigested food, but said he had no nausea. He was perfectly cold all over, and bathed in a cold sweat. I administered anodynes and carminatives, applied a warm poultice with mustard, to the seat of pain, endeavored to bring about reaction, by warmth, to the extremeties, but nothing gave relief; he still complained of the pain, and would beat his breast with his clenched hands. At 10 o'clock, I gave him a large dose of calomel and morphine, also gave several enemas, under which, in the course of two hours, he *seemed* to react and get warm, and he remarked, 'Doctor, I feel better every where else, but that pain still remains—it is a persistent and abiding pain, that seems to press through me against my spine.' All this time his pulse was *regular, full, strong*, but rather *slow;* his strength was good, for he got out of bed several times without help. At 1 o'clock I repeated the calomel and morphine; at 2 o'clock he said, 'the pain has left my breast and gone to my heart and left arm—do you think that is a good sign?' I asked him if in changing it still retained its severity, and he answered me. 'yes.' I applied my hand over the heart, but there was no palpitation. He also said, 'Doctor, I think I am getting weaker, feel my pulse.' I felt it, and though it beat regularly, it seemed slower and weaker. I left the room for about fifteen minutes, when I was suddenly called in to see him die; his heart had already stopped beating, but he breathed two or three times after I got to the bed-side. The diagnosis throughout was difficult and obscure."

Post-mortem.—Stature short, stout, muscular, inclined to be fat, chest remarkably large and well developed. Neither head nor abdomen was examined. *Lungs* perfectly sound throughout, free from adhesions or any signs of disease, acte or chronic. *Pericardium*, fully distended with fluid, and when opened was found to contain blood and serum. This being carefully removed by a sponge, I introduced my hand into the sac, beneath the heart, and on grasping this organ, the contained blood was seen to spirt

from a small perforation in the anterior wall of the left ventricle, disclosing at once the immediate cause of death. The heart was then removed from the body for further inspection.

General Appearance of Heart.—Large, pale, flabby, and coated with fat over the greater part of its surface; the auricles, aorta, pelmonary artery and veins completely imbedded in fat.

Right Ventricle.—Somewhat dilated, whole exterior surface coated with fat, muscular substance flaccid and thinner than usual, diminishing towards the apex, near which muscular fibres were entirely wanting, except a few scattered ones on the external surface; the blood here seemed to be retained in the cavity simply by the fat; the coating of fat at different points was from three to five or six lines in thickness.

Left Ventricle.—This fatty covering extended from the right over to the left ventricle for about an inch in width, the whole lenth of the septum, and the apex also for about an inch or more was fat. On the anterior, middle portion of this ventricle, commencing at the margin of the fat, was an irregular, bruised looking patch, about the size of a dollar, and on the outer edge of this, was the fatal rupture. When cut into, the bruised looking part presented a dark, bruised, bloody appearance, not unlike recently hepatized lung, the fibrous, muscular appearance being destroyed. The corresponding internal surface showed evident marks of ulceration, a portion of the substance being excavated and covered in part with a thin cyst; the surface around the patch, on the inside, was red, inflamed, with deposition of coagulable lymph. It is worthy of remark, that this spot of the heart, which seemed to be the most diseased, and in which the rupture took place, was more free from fat than any other; it joined the fat portion *abruptly* in half its circumference. This ventricle, was a little dilated. There was nothing peculiar in the auricles except being buried in fat, and the mitral, tricuspid and semi-lunar valves were all pertectly healthy.

Mr. Maffitt, as stated, had only been in Mobile a few weeks, and I could get no satisfactory information as to the previous history of the case. He had been for some days previous to his death, laboring under a slight attack of diarrhœa, but his friends believed him to be in vigorous health. When questioned by Dr. Gaines, he stated that he had had some slight palpitation and pain in his left side. It is remarkable that so much disease should have existed with so few symptoms to indicate it, though similar examples are on record.

There can be no doubt that organic disease had existed months, leading inevitably to death. What influences his protracted mental excitement exercised in causing the disease, must remain a matter of doubt; and though the malady is one which marches steadily onward, it is highly probably that it termination was hastened on by moral causes.

I have never investigated the grounds on which are based the charges which have been brought against Mr. Maffitt. and am unprepared to express an opinion as to his guilt or innocence; but it offords me much gratification to say to his famlly and friends, that the post-mortem has at least wiped from his memory the damning sin of suicide.—*New Orleans Med. and Surgical Journal.*

THE PERIOD OF LACTATION AND ITS CONNECTION WITH SUBSEQUENT GESTATION.

BY H. SHEARMAN, M. D.

Every process in nature, has its assigned period, or space of time, in which it is performed. Observation shows us that the sun which lights us, revolves on its axis in a certain number of our days, and that a series of planets, of which our own world is one, revolve around it, in certain definite, but differing spaces of time. *Induction* and *deduction*, assist us to the conclusion, that all the stars of Heaven are either suns or planets, and that they all move on their axis, and in their orbits, in definite periods of time.

All the phenomena of our world are periodical. The seasons, day and night, the weather, the formation and production of the three great kingdoms of nature—the mineral, vegetable, and animal, are all periodic.—Some of the most apparently casual and incalculable occurrences have been shown to be subject to the law of periodicity; as the return of comets, a succession of hot or cold years, abundant or defective harvests, the recurrence of epidemics, the revolution of empires and opinions, and the rise and progress of discoveries. Indeed the whole universe must be subject to laws of time and place, and therefore of periodicity, or how could there be any plan, progression or development? How could there be prophecy, prediction and fulfilment?

From this æronautic survey of the periodic constitution of the universe, we descend to the apparently insignificant, but in reality important consideration, of the periodical laws of woman.

She commences her career as a puling and unobservant babe, and progresses through the conditions of infancy, childhood, adolescence, and puberty, to maturity; when she becomes a reproducer of her race, a former and moulder of society. Nine months she was *in utero*, while being formed from a mere speck scarce visible, into a full grown and a full formed child. For nine months more, she draws her her sustenance from a mother's breast,, ere she had teeth enough to masticate her food herself. Seven years she spent acquiring muscular and osseous strength enough to walk, to run, to leap, to dance, and intellectual and moral power enough—to know, to reason, and to feel. Seven more she spends, without the consciousness of sex, in gathering thought and feeling, and then seven more she spends in her development as a woman, and she is complete, a reproducer, and educator of her race.

When she commences the distinctive portion of her life, her period of womanhood, she has a monthly flow of a peculiar fluid from her uterus, and this continues, if she be not pregnant or disordered, for twenty years or more, a monthly preservation of, and preparation for, the mystery and felicity of her being—the process of gestation.

If wedded love and happy impregnation be her lot, every two years of her productive period, she adds onother human being to the race, an fur-

nishes the commonwealth with muscle, mind and morals, preserves her own life by the due performance of her functions, and gives her husband happiness and health, and lengthens out his life.

The period of lactation, as appointed by the laws of unobstructed and propitious marriage, is about nine months. Then is the woman fit again for the performance of gestation; and the milk ceases to flow, or it is of little value to the child. Gestation may commence again as early as the seventh, or not until the twelfth month of lactation, but the average period is the ninth.

The reasons why a woman occupies the period of nine months, in the two processes of utero-gestation and lactation, must be sought for in the constitution of the world in which she lives, and in the nature and design of that peculiar race of beings, which she thus produces and supports. The world which she inhabits, though immense, compared with the small space which she requires, living or dead, is yet a bounded space; and does not furnish sustenance quite so gratuitously, as at first sight we might suppose. Some space and time are requisitely interposed between each human advent, or there would be nothing for the race, but a mere mass of misery and death.

The geological phenomena which are presented to us, teach us, that each condition of our globe, which has fulfilled its part in the great act of planetary destiny, is yet subservient to the greater drama of the destiny of solar stellaries; and must have been performed in periodic times, in order to accord with all the greater movements and performances of the vast whole.

The earth on which we are performing our apportioned task, is now accomplishing its most important cycle. The race of man, the highest inhabitant, that yet has graced its surface, like other races with an animal nature, is not eternally to reproduce. There is a limit, within which the last gestation and lactation, must be accomplished. The last scene of the last act of the grand drama of the human race will be performed, and the catastrophe of all the nations, tribes, and individuals will appear.

The generation and gestation, birth, lactation. education, and formation of the race, must all depend upon, be subject to, the greater movements of the mechanism of the heavens.

The present cycle of the earth must be performed within a certain space of time. The whole of the arrangements and productions of the earth, are for the ministry of good to man. The number and condition of the race, must be a definite arrangement, or nothing could be carried out by them, or known of them. The definite condition of the race, being given, the definite condition of each one must be admitted. The greater law includes the less. Hence every human advent, is accomplished by the combined laws of the great universe.

Though man appears upon the earth but as an animal, he has a spiritual nature; and as he progresses in his being, the wonderful disparity between himself and other animals, become most manifest. This spiritual nature has its laws of progress and development, and being of a higher nature than the animal, subjects the lower, necessarily, to its requirements. This

spiritual nature has for its companion and domestic, the intelligent nature, which requires a long and careful training. These are a few of the great series of the code of laws which regulate the periodic movements and phenomena of our bodies, especially of those of woman.

The body of a human being is destined to last for seventy years or more. It is a principle of nature well known to artisans and machinists, that an article of manufacture, or a machine, which is designed to last for a long period, must be composed of fine particles, and have more labor spent upon it, than will be required for one which is to last a shorter time. Upon this principle, the body of a human being necessarily must be slow in its formation and its growth,

The uterus when first impregnated, is not larger than an ordinary pear, nor capable of containing half an ounce of fluid. At the termination of its pregnancy, it contains a child weighing eight or nine pounds, a placenta and its membranes weighing a pound or more, and two or three pints, or even quarts, of liquor amnii. The increase of the uterus, is much more extraordinary as a phenomenon, than the increase of the fœtus, but both of them must be limited, or the death of the woman would ensue. What are the laws and causes of the limitation of this increase?

At first, the uterus is merely wanted as a bag or bladder, to contain the ovum,, with its membranes and its fluids. The muscular structure, therefore, is of a very slight and feeble texture, and scarcely manifests the proper quality of muscle—contraction and dilation. The ovum is a quiet substance, requiring nothing more than a safe place for preservation, and therefore, is sufficiently protected and provided for, by a membranous sac.

In time, however, the fœtus is developed, and as its muscularity increases with its size, and as the pressure on the sac in which it is contained increases, resistance to its pressure and its movements, becomes a requisite provision for the preservation and well being of itself and mother. The uterus, from the necessity of the case, becomes increasingly a muscular organ, and as it grows in size, the muscular tissue is augmented, to resist the pressure and the movements of the fœtus.

If these two processes and powers progress in equal ratio, their limitation must depend upon some third condition or provision. This is discovered in the final confirmation of the woman. Her form admits of but a certain definite amount of size and action of the uterus; when that is passed, resistance from the superior and primary organization—the mother —overpowers the secondary and inferior—that of the uterus—and that in turn, compels the tertiary—the fœtus—to submit.

The fœtus grows, becomes more muscular and active, and the uterus expands and strengthens, to contain, and to resist the growing augmentation and activity of the fœtus. At length, encroachments on the momedium of the uterus, is employed in order to dislodge the burden that oppresses her.

The muscles of the abdomen and dorsum, the thorax, and the pelvis, and the lumbi, all conspire and all co-operate to force the intruder from his hitherto most welcome sanctuary.

The uterus being weakest at the aperture, must offer least resistance

there, and consequently will give way to the contractile force of the superior muscles, and the efforts of the fœtus for its liberty. At length the forces of the mother and the child are all combined and concentrated on the act of utromission, and the child is born.

The human offspring is the most dependent on the mother of any offspring of the animal kingdom. During the period of lactation, it is absolutely helpless, and would perish but for the protection and provision of the mother. It has no teeth to masticate its food, could it be obtained; but as it does not gain the power and property of locomotion until it has attained its second year, there is a physical impossibility of sustaining its existence, were it left alone. The mother's time, attention, feeling, happiness and interest, are all required and well laid out upon her infant. No capital and skill and labor are so well employed, by any one, as by the mother. Every investment yields a rich and fruitful profiiting return.

Now, if a woman could recommence gestation as soon as parturition was accomplished, she would be unable to fulfil her dnty to, or feel the pleasure of, her offspring. The process of lactation would be seriously interfered with, or entirely superseded; and the care and tendance of her would become a burden most intolerable to her. The period of lactation, therefore, is determined morally and physically, by the lapse of time which is required before another impregnation can be properly effected. That appears to be, from all the circumstances of the case, from seven to twelve months—or an average of nine.

In every natural process of gestation, a woman's health and whole condition are improved; because, in order to sustain her parasitic offspring, she must assimilate more food, and therefore make more blood, which gives a fullness to her person, and an energy to her functions, which she has not in the unimpregnated condition. So, in the process of lactation, a woman keeps up her improved condition, and is the healthier and happier for nourishing her offspring.

All functions that are intermittent or occasional, are provided with an organization fitted for their particular office. The mouth, in man, is not adapted to continual mastication; and when it is perverted to so foreign, low, and base a purpose, as the chewing of tobacco, how soon the symmetry and beauteous adaptation of the organ are impaired. The bowels and the rectum were not meant for frequent peristalic motion, and when that function is performed too frequently, the organization being unfitted for it, suffers exceedingly, and soon becomes most fearfully deranged.

Now, both gestation and lactation are intended to be no more than occasional performances. In order for gestation to commence, the uterus must have the confirmation suited for the passage of the semen, by capillary attraction and assent. This cannot take place with the uterus in the condition which is requisite for carrying a full grown fœtus. The uterus must, therefore, be contracted, and a great proportion of its substance be absorbed, after a parturition, before another impregnation can occur. Supposing we allow that in a few cases, impregnation has occurred within a month from parturition, the only prove how soon the process of re-preparation can be accomplished. Indeed, if we admit, what we are

readily disposed to, that the processes of pregnancy and lactation may simultaneously proceed in a few cases, we are no more entitled to conclude that this is the design of woman's constitution, than that a woman was designed for bearing twins, or quadruplets, because she sometimes bears them.

The muscular fibres of the uterus have a peculiar organization. They augment in length, in breadth and thickness, and spread out in fasciculi in different directions. One series of them seems to be a counterbalance of the other, and thus they are prevented from contracting prematurely. Their organigation is much more elaborate than that of commoner muscles. They mature and accumulate their force for one grand display, and in that act exhaust their power, disorganize their substance. They must be repaired, if not renewed, for future service. The old, worn out materials must be removed, and much repair accomplished, ere the uterus can re-perform its function.

This operation can be very properly conducted while the next process to gestation—that of lactation—is carried on. The vigorous and plethoric state of the circulation would be injurious to the mother, had she no active occupation for her blood. The admirable function of lactation preserves her health and happiness, while it sustains her infant's life, and gives her time and opportunity, as well as means, for reparation of her reproducing organs.

The chemical constituents of the milk, require the same materials from the blood that are employed in nourishing the fœtus in the uterus—nitrogenous and saline combinations. It cannot, therefore, be in harmony with the monogenous adaptation of woman that she should produce and nourish simultaneously.

How then is the period of lactation determined? In proportion as the child obtains the powers of respiration, locomotion and mastication, more solid food is requisite for its well being, and as it necessarily is in the midst of other food, its senses and its appetite increasingly become excited by the food, and finally demand it. The intesity of interest which the mother feels for the well being of her offspring, turns her attention and her feelings to her function of lactation, so long as her infant depends upon her absolutely for support, This feeling, operating on that portion of the brain which supplies the mammæ, the caloric of the brain, in its galvanic state, excites the blood-vessels to nourish and supply the mammal glands, for their required service. They necessarily enlarge and multiply, and keep up a *pro hac vice* or abnormal circulation and supply.

If the intensity of interest for the infant be maintained, the milk will flow continuously, for a much longer period than the natural term. Hence mothers, who are widowed during their lactation, frequently lengthen out the process, to enjoy the comfort which they find in the dependence of their infants on their care and sustenance. Hence, also, when a woman dreads another impregnation, she may, by the withholding of her feeling and desire for impregnation, render the uterus incapa-

ble of its distinctive function—while, by her wish to lengthen out process of lactation, she accomplishes her object.

When marriage is as it should be, a spiritual chord, not a mere joyless and insipid unison; then, impregnation is the woman's highest aim and feeling, and lactation is but secondary. She gives her infant sustenance because she has gestated it; and while she looks with rich delight upon the sustenation, care and culture of her offspring, the process of creation and production is the one which fires her soul with the most ntense delight and admiration. For a woman to be so anxious for impregnation, as to neglect the sustenation of her offspring, would be a departure from both the moral and the physical laws of her being; and therefore an insanity. Such a case of course is, of necesity, a very rare one. The mere desire of commerce with the male sex, must not be confounded with the aspiration after offspring. Every true wife appreciates the difference, and every true husband who possesses such a wife can estimate her feelings, though he cannot have them.

We see, then, that there are both physical and moral barriers to the processes of lactation and gestation being simultaneous. If it were possible for woman to perform these proceses together, she would be such a mere producing, nourishing machine, as to unfit her for the offices of wife and mother. It is a matter of the highest moment to a woman to be conscious of her duties and her interests, in order to attend to them; and therefore every increase of our knowledge of them is exceedingly desirable.

In order to sustain the process of lactation, a woman must assimilate more food than is required for her own sustenance, and this gives to the organs of digestion and assimilation, and activity and increase which invigorates and enlarge the body. Not only so, but there must be a greater quantity of food employed, in order to perform the process of lactation, than if the child were fed direct, as in gestation. The milk is a secretion, and in all secretions, there is a portion only of the blood employed. That portion of the blood from which the milk has been secreted, is now no longer fit for circulation, and must be re-assimilated before it can be used for any purpose of the animal economy.

By consequence, there must be an increased amouut of the excretions, or there will be depositions in the caverns, sacs, and tissues of the body. Hence, often, women who have suckled frequently and long, become pinguidenous, and lose their comeliness, activity and health. The ingestive and assimilative processes exceed the formative, distributive and egestive ones, and serious depositions soon take place, impeding and obstructing many of the functions requisite for life and happiness. One of the sequences of long lactation is sterility. The ovaries become imbedded in a mass of fat, the fallopian tubes obstructed, and the uterus and vagina overlayed with adipose tissue, so as to be deprived of much of their contractile sensibility.

Part 3,--Editorial.

PROGRESS OF ECLECTICISM IN THE STATE OF NEW YORK.

Those who have been enlisted in the cause of Medical Reform for many years, and have struggled long and untiringly for the support of a liberal science, when they take a retrospective view of the past, have cause for rejoicing and encouragement, although at present there is a great work for them to accomplish, which still requires energy and perseverance. Only a few years since, there could not be found one who espoused Eclectic principles, whose abilities however transcendant, and whose acquirements however extensive and thorough, upon whom was bestowed the degree of Doctor of Medicine. Even those who received their license to practice physic and surgery according to the provisions of the statute, and through Allopathic courtesy, if they did not live up to the faith of their *Alma Mater*, were excommunicated from those Medical Societies, published as irregular physicians, disqualified to practice medicine, unworthy of public confidence, and upon them was meted out a full measure of obloquy. The dissenter, though improved in his practice, must, without an examination into the practical results of his deviation, be subjected to a *party* inquisition, which might at pleasure deprive him, as far as possible, of his well-earned standing and reputation—gained, perhaps, by a successful competition with the legitimate sons of Allopathy.

Legislation interposed and granted the Allopathists exclusive favors, and likewise deprived every deviating practitioner of all reward for his medical services. Indeed, this act virtually deemed the dear people incompetent of judging correctly, with whom they ought to entrust their lives in a time of trial and danger. Even the erudite physician, who, having seen the folly of Heroic medication, and desirous of trusting more to nature and the kindly operation of milder medicines, deviating from orthodoxy, must now act only in the humiliating capacity of nurse, and dispense his services gratuitously to his patrons. The finger of scorn was frequently pointed at him deridingly, because he did not conform to the requirements of so-called Science and because he did not abide by the wholesome law of the land, and urged

instead of maintaining his uncouth, humbling position—galling to every high-minded man—to surrender his obstinacy and his independent notions, and once more rank and file with a time-honored association in Medicine. A few years since, many of our *Pioneers* were thus insultingly taunted by "regular" Medicine,—and simply because they thought the science still imperfect, and the practice dangerous, and were acting upon this belief.

Such a state of "Law and Medicine," created a necessity for empiricism, to demonstrate the fallacies of Allopathy. Many men, with but a partial acquaintance with Medicine,—almost strangers to Science and Art in its practical details,—paraded their empirical claims before the people, and were freely patronized. Their success, when compared with the ordinary practice, did not justify the assumptions of the latter to scientific superiority. And from that hour to the present moment, their exclusive pretensions to Science, and its successful application in alleviating human sufferings, have commanded less confidence from those who have always decided the respective merits of those soliciting their patronage.

That is a country where freedom of thought is tolerated, and the people have learned to think and act for themselves, on the subject of Medicine, as well as on theological matters. Having witnessed the anti-republican tendencies of sectarian Physic,—its unwarrantable claims, and its entire devotion to party interests,—they repealed the unjust laws protecting one order, while detrimental to all others, and placed medical men more nearly on the ground of equality, hereafter to substantiate their claims to public trust through the medium of a successful practice. A similar revolution occurred in sister States, and in some of them greater changes followed than in their own. Colleges, based upon liberal principles, were chartered; and those who had been and were still successfully engaged in practice, and also their students, were heartily welcomed to partake of the benefits accruing from an impartial acquaintance with all the departments of Medicine.

And now, how changed the scene. Where, only a few years since, could not be found one who was well qualified, titled with the degree of Medicine can now be found many,—and those too in love with a liberal science, devoted to its practice, and demonstrating the superiority of Eclectic principles. The advantage which was gained by Hunkers years gone by, however, is still tenaciously retained. Old School Physic has been blest with rich endowments from the State, with which it has reared many magnificent

college edifices,—has furnished extensive libraries and choice cabinets,—indeed, has been granted all the advantages which a generous legislation could give. How well it has wielded these favors in behalf of an impartial science, every innovating and professedly improved practice can bear ample te timony.

But the scene is still changing. The skies are brightening, and the storm which has howled through the night of the past, has now nearly spent its force, while the genial sunlight of Truth is dispelling the clouds of gloom that mantled their hopes and darkened their prospects. A brighter and more glorious day has dawned—is now realized,—greater liberty is enjoyed, and more correct principles are tolerated. Comparing the present with the past, enough has been accom plished, we think, to gladden the heart of the philanthropist, and to awaken in him new impulses to labor with his might in this common cause of humanity.

[From the N. Y. Eclectic Medical and Surgical Journal.]

ECLECTIC COLLEGE OF PHARMACY.

The subject of establishing an Eclectic College of Pharmacy has been contemplated by some of our friends, and urged as a measure which ought to be immediately taken. Prof. Eaton has on more than one occasion suggested its propriety, for the promotion of the interests of those who might feel desirous of witnessing the general application of Chemistry, general and pharmaceutical, to the arts,—giving a practical understanding of the science, and applying their knowledge to actual uses. This morning we received a letter from a physician, distinguished for the interest he has manifested in this subject, as well as in the promotion of the Eclectic Medical Practice. We take the liberty of laying it before our readers:—

"Dear Sir:—It has been proposed by some eminent physicians with whom I have talked and held correspondence, that the true policy is, to establish a regular College of Pharmacy. Professor Beach is decidedly in favor of it, although he thinks it ought to be established in New York city; Yet I think he would not object to its locality at Rochester, inasmuch as our school is located there. The object is to make it official, having the same relation to the New School that the established College of Pharmacy has to the Old School. This arrangement would in no wise interfere with your

Medical College. The Lectures in the College of Pharmacy would include General and Pharmaceutic Chemistry, Theoretical and Practical Pharmacy, and Materia Medica. These Lectures could be held two or three evenings each week, in the same hall that your school is had. It would give an additional influence to your school, and at the same time would give a character to our Pharmaceutical establishment, which would place it in a condition to receive the patronage of an enlightened profession and the public. The official stamp should be placed on every article of medicine manufactured or sold. A well arranged Pharmaceutical establishment ought to comprise the Store, Laboratory, Store-room, Drying-room, and Powdering-room, and a good supply of water. Dr. Beach has proposed that a substantial capital be raised by a stock company—shares $50. I know a number of physicians that would take stock to the amount of from $100 to $1000. I have no doubt but that I could obtain any amount of capital requisite to establish a well regulated System of Pharmacy. If you should think favorably of the College of Pharmacy, would it not be well to notice it in the next Journal, and also appoint a day—say next week, or soon—for a meeting of physicians to consider the matter and make arrangements? Write me your opinion by return of mail. Respectfully, yours, &c."

The project is perfectly feasible, and we invite further attention to it, and meantime shall be happy to co-operate with any to take such steps as may be thought necessary for the advancement of this object. We would be glad to offer our views more in detail; but our editorial pages are already filled, and will not allow of any further remarks in the present number of the Journal.

CENTRAL MED. COLLEGE—PROSPECTS OF A LARGE CLASS.

Our Journal goes to press too early to arrive at any definite conclusions as to the size of the Class for the approaching session. Our high anticipations are now being realized, and students from every section are arriving daily, to attend our course of medical training. We hope all true friends of American Eclecticism in Medicine will bestir themselves, and send in their fresh recruits who are desirous of joining the "Van of the Army."

Quite a number of Ladies are also present, and will pursue a regular course of Medical Education.—[*N. Y. Eclectic Med. & Surg. Journal.*