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THE UNFETTERED CANADIAN.

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(From the Edinburgh New Philosophical Journal.)

ACCOUNT OF THE RUSSIAN VAPOR BATH.

BY T. S. TRAILL, M. D.

The existence in Hamburgh of two establishments where the Russian Vapor Bath is used, brought to my recollection the description given by Acerbi and other travellers, of the intense heat and sudden transition to cold, so much relished by the natives of Northern Europe, raised my curiosity to experience in my own person the effects of this singular species of bathing. I was further induced to take this step, from finding myself suddenly oppressed with a violent feverish cold, which raised my pulse considerable above 100 degrees and rendered me little able to join the public dinner table in the Apollo Sael.

Accompanied by two friends who wished to make the same experiment, I repaired to the Alexanderbad, which is under the direction of its proprietor, a Jewish physician, who had liberally opened it gratuitously to the members of the society of *Naturforcher*, then assembled at Hamburgh. We were ushered into a very neat saloon, provided with six couches, beside each of which stood a dressing table, and a convenient apparatus for suspending the clothes of the bather. Here we undressed, and were furnished with long flannel dressing gowns and warm slippers, after which we were all conducted into a small hot apartment, where we were desired to lay aside our gowns and slippers, and were immediately introduced into the room called the bath, in which the dim light admitted through a single window of three panes, just sufficed to show us that there were in it two persons like ourselves, in *puris naturalibus*, one of whom was an essential personage, the operator, the other a gentleman just finishing the process, by a copious effusion of cold water over his body. This sudden introduction into an atmosphere of hot steam was so oppressive that I was forced to cover my face with my hands to moderate the painful impression on the lips and nostrils, and was compelled to withdraw my head as much as possible from the most heated part of the atmosphere, by sitting down on a low bench which ran along two sides of the bath.

The bath room is about fifteen feet long, by about as much in breadth. It is lined with wood, rendered quite black by constant immersion in hot steam. On two sides it has three tiers of benches or rude couches, each of which is calculated to hold two persons, with their feet towards each other; so that twelve might bathe at the same time. The lowest bench projects farthest into the room; they rise two feet above each other, and each has a wooden pillow at the ends.

In one corner of the farther end of the apartment stands the furnace, which is supplied with fuel from without, and has a thin arch of brick turned over the fire, against which the flame reverberates until the arch is red hot. To increase the heated surface, numerous small earthen jars or broken pottery are piled on the arch, and all are kept up to a low red heat. On these a basin of water is occasionally dashed; and the clouds of steam which instantly issue from the door of the heated chamber, form the source of heat employed to maintain the temperature of the bath.

In the corner opposite to the furnace is a reservoir of cold water, into which, during our stay in the bath, the person who manages it

frequently plunged to cool his surface, a precaution not unnecessary for an individual who is exposed daily eight hours, stark naked, to a temperature quite oppressive to the uninitated. Yet this exposure and this alternation cannot be unhealthy, for I never saw a more athletic man than this person, who informed me that he had been constantly engaged in this occupation for 16 or 18 months.

The centre of the ceiling of the bath room is perforated by numerous holes, which allow a copious shower bath of cold water to descend on the head of the bather, when a valve, managed by a cord, is opened.

Such is the apparatus necessary for a Russian Vapor Bath.

After remaining some time in the bath, the first sensation of oppressive heat subsided, and I ascended to the second tier of benches, the wood of which, however, was somewhat cooler by the plentiful effusion of cold water. At each remove, this opperation is repeated; otherwise the contact of the wood would be insupportable to the skin. It is needless to say that the perspiration soon began to run from every pore, not merely as a moist exhalation, but ran off in copious streams. This greatly moderated the sensation of the heat.

After lying extended for some time on the second tier of benches, a bucket of cold water was dashed on the upper one, and we removed there; but the heat so near the ceiling was fully as oppressive as on first entering, and I found it necessary to allow the air to enter my nose through my fingers. If I inhaled it with my mouth wide open, I felt an oppressive heat in my chest, but by degrees even this degree of heat became supportable, though I never was able to sit upright on the bench, so strong was the temperature of the humid atmosphere close to the ceiling.

While we were grouping our way from bench to bench, the assistant more than once plunged headlong into his cold bath, to refresh himself ere he commenced on us the next part of his professional occupation.

We were, one by one, requested to descend to the second tier and the assistant, grasping in his hand a bundle of birch rods, began assiduously to whip his patients, who lay extended on the bench at full length, from head to heel. This application differs essentially from the well remembered scholastic birch discipline, for the leaves are left on the twigs and the sensations produced in no way resemble the effect of the instrument employed in English schools to convey a knowledge of Greek and Latin into the head of our youth. In fact, this species of whipping is performed very dexterously, with a sort of brushing motion, from the shoulders downwards, and the application becomes general over the body and limbs, as the bather turns on his wooden couch. The sensations produced by this operation are agreeable, and are very far from producing that excessive redness of the surface described by Acerbi.

The operator now anoints the whole body with a liquid mild soap; and, after again mounting to the upper tier for some time, we descend, one by one, to the midle of the floor, where a powerful effusion of cold water from the shower bath in the ceiling, removes every vestige of soap. This sudden effusion of cold water is remarkably grateful: it is scarcely possible to describe the effect, which is highly exhilerating and refreshing.

It is usual again to undergo the steaming after the temperature of the bath is increased by the effusion of water on the glowing pottery in the furnace. For this purpose the operator opens the doors above described and places us out of the direction of the immediate efflux of the steam, he dashes in successive jets a small bucket of water into the furnace; the apartment is instantly filled with clouds of steam at a high temperature, and when the door of the aperture is closed, we resume our places on the benches, gradually proceeding to the highest as we become inured to the temperature. From the upper tier we finally descend to have the shower bath repeated, after which we leave the bathing room are rubbed dry by assistants in the small heated apartment, where we resume the flannel dressing gown and slippers, and are reconducted to the saloon, where we find the couches spread with blankets, and we recline for half

an hour in a most profuse perspiration and in a state of luxurious languor and mental tranquility.

On a subsequent occasion I provided myself with the means of ascertaining the temperature of ths bathing room, and noticed its effects on the pulse of myself and two other bathers.—The heat is generally from 45 to 50 degrees of Reaumer, that is, from 133 degrees 55 min. to 144 degrees 5 min. of Fahrenheit. On the occasion referred to, it ranged from 32 deg. to 46 deg. of Reaumer—126 deg. and 185 deg. 5 min. Fahrenheit—in the lower part of the bathing room; but I was unable to examine the temperature near the ceiling, on account of the thick vapor and the intensity of the temperature, which affected my eyes. This temperature high as it is, is far short of what Acerbi avers of the Finish baths; he says that they reach from 70 to 75 deg. of Celsius —158 to 167 deg. of our scale—but perhaps his thermometers were subject to the open fire place, in the rude baths of that people; for their furnace consisted of a few loose stones piled into a sort of rude arch over a fireplace on the floor of the hut, or perhaps he did not accurately ascertain the temperatue, as he never entered the bath but momentarily for the purpose of placing his thermometer; and I am confirmed in this by observing that the Finish operator, in his plate, appears dressed in his ordinary clothes, which I should think insupportable in so high a temperature as he assigns.

The effect of the Russian Vapor Bath is, to accelerate the pulse, which soon regains its natural standard on leaving the bath; and when I took it,in a highly feverish state, I was within an hour after, entirely free of fever and able fully to enjoy the philosophic soiree that even ing.

The process of the vapor bath is completed, by a plentifnl supply of towels, with which we gradually dry the surface, while we are well rubbed down by an assistant. We then resumed our dress. and returned to a coffe room where there was a plentiful supply of newspapers, and had a cup of good coffe for two pence sterling.

I inquired anxiously into the medical efficacy of the Rusian Vapor Bath, and found that in chronic rheumatism, or stiffness of limbs consequent on gout, and other long continued inflamations, in some cases of palsy, in various cutaneous diseases, it is a most powerful and valuable remedy. While in the establishment I saw an invalid enter, who informed me that after severe acute rheumatism, of several months duration, he was so lame that he had been carried by two persons into the bath; but that, after five or six times undergoing the discipline I have described, he could walk alone as well as I saw him, and appeared confident that in a little time he should entirely recover the power and flexibility of his limbs.

From all that I could learn in Hamburgh, I am inclined to consider the Russin Vapor Bath as a most valuable remedy in some chronic diseases, and regret that we have not a similar establishment in any of our medical charitable institutions.

February, 1832.

(From the German of Gausecn.)

ASTONISHING ACCURACY OF THE BIBLE.

An astonishing feature of the word of God is that notwithstanding the time at which its compositions were written, and the multitudes of the topics to which it alludes, there is not one physical error—not one assertion or allusion disproved by the progress of modern science. None of those mistakes which the science of each succeeding age discovered in the books of the preceeding; above all, none of those absurdities which modern astronomy indicates in such great numbers in the writings of the ancients—in their sacred codes, in their philosophy, and even in the finest pages of the fathers of the church not one of these errors is to be found in any of our sacred books. Nothing there will ever contradict that which after so many ages, the investigations of the learned world have been able to reveal to us on the state of our globe, or on that of the heavens. Peruse with care our scriptures from one end to the other, to find there such spots; and

whilst you apply yourselves to this examination, remember that it is a book which speaks of everything, which describes nature, which recites its creation, which tells us of the water, of the atmosphere, of the mountains, of the animals, and of the plants. It is a book which teaches us the first revolutions of the world, and which also feretells its last; it recounts them in the circumstancial language of history, it extols them in the sublimest strains of poetry, and it chants them in the charms of glowing song. It is a book which is full of oriental raptures, elevation, variety and boldness. It is a book which speaks of the heavenly and invisible world, whilst it also speaks of the earth and things visible. It is a book which nearly fifty writers, of every degree of cultivation, of every state, of every condition, and living through the course of fifteen hundred years, have concurred to make. It is a book which was written in the centre of Asia, in the sands of Arabia, and in the deserts of Judeah; in the courts of the temple of the Jews, in the music schools of the prophets of Bethel and of Jericho, in the sumptuous palaces of Babylon, and on the idolatrous banks of Chebar; and finally, in the centre of the western civilization, in the midst of the Jews and of their ignorance, in the midst of polytheism and its idols, as also in the bosom of pantheism and of its sad philosophy. It is a book whoose first writer had been forty years a pupil of the magicians of Egypt, in whose opinion the sun, the stars, and the elements were endowed with intelligence, re-acted on the elements, and governed the world by a perpetual alluvium. It is a book whose first writer preceded, by more than nine hundred years, the most ancient philosophers of ancient Greece, and Asia—the Thalesea, and the Pythagorases, the Zalucuses, the Zenophons, and the Confuciuses. It is a book which carries its narrations even to the hierarchies of angels—even to the most distant epoch of the future, and the glorious scenes of the last day.—Well, search among its 50 authors, search among its 66 books, its 1186 chapters, and its 31,173 verses, search for only one of those thousand errors which the ancients and the moderns committed, when they speak of the heavens or of the earth—of their revolutions, of the elements; search—but you will find none.

(From the Philadelphia Botanic Sentinel.)

INFLAMATORY RHEUMATISM.

On Monday evening, the 9th inst., I was called to visit Mr. Henry Snider, residing back of 42 Duke street, who was suffering under an attack of inflammatory rheumatism of the lower extremities, of four weeks standing. He had taken every thing he could think of to procure relief, but found none. Some few days previous to his sending for me he had taken an ounce and a half of tincture of opium, (laudanum,) which lulled the pain very little, if any; but produced such obstinate constipation, that nothing passed from his bowels since the previous Wednesday—five days. His legs from the hips down, were swelled very much. He could not move either one in bed an inch, and they were so sore as to render it difficult for others to do it.

I ordered a strong tea of Nos. 2 and 3 to be taken every three hours during the night and following morning (my engagements being too urgent to admit of my giving him a course that evening) and an injection to be given at night and repeated in the morning. On Tuesday, about 10 o'clock, A. M., I found him in a gentle perspiration with a slight abatement of pain and soreness. I commenced giving him a thorough course, administering the third preparation as an emetic, after a steaming which caused profuse perspiration. The emetic acted as I had never seen it before, though no doubt it was owing to the preparations previously taken. The first teaspoonful operated copiously in about five minutes from the time it was swallowed, ejecting from the stomach large quantities of bile. I however, administered the dose a second and third time; both producing effects like the first. As the perspiration had been so very profuse, I did not consider it necessary to repeat the vapor bath after the emetic. I ordered the same medicines to be taken after as before the course. On Wednesday I administered a second course, (giving

two vapor baths,) which operated in the usual way. I had almost forgotten to mention that this (Wednesday) afternoon, I found him sitting up, and able to walk across the room, with a little assistance. The medicines continued, with two injections a day. On Thursday morning he had a natural passage from the bowels—the first in eight days. On Friday he expressed himself able to walk about, and as a manifestation of his satisfaction, paid my bill that day.

I have reported this case, not because a cure of rheumatism by Thomsonians is an unusual thing, but because of the singular operation of the first emetic, and the uncommon quickness of the cure. WM. HENRY FONERDEN.

Philadelphia, April 21, 1838.

(From the Huron Signal.)

OUR OWN BROAD LAKE.

We cannot boast of high green hills,
Of proud, bold cliffs where eagles gather,
Of moorlane glen and mountain rills,
That echo to the red-bell'd heather.
We cannot boast of mould'ring towers,
Where ivy clasps the hoary turret,
Of chivalry in Ladies' bowers,
Of warlike fame, and knights who wore it—
But, had we Minstrel's Harp to wake,
We well might boast our own broad lake!

And we have streams that run as clear,
O'er shelvy rocks and pebbles rushing—
And meads as green, and nymphs as dear
In rosy beauty sweetly blushing—
And we have trees as tall as towers,
And older than the feudal mansion—
And banks besprent with gorgeous flowers,
And glens and wolds, with fire-flies glancing;
But prouder—loftier boast we make,
The beauties of our own broad lake.

The lochs and lakes of other lands,
Like gems may grace a landscape painting,
Or where the lordly castle stands,
May lend a charm, when charms are wanting;
But *ours* is deep, and broad, and wide,
With steamships through its waves careering,
And far upon its ample tide
The bark her devious course is steering;
While hoarse and loud the billows break
On islands of our own broad lake!

Immense, bright lake! I trace in thee,
An emblem of the mighty ocean,
And in thy restless waves I see
Nature's eternal law of motion;
And *fancy* sees the Huron Chief
Of the dim past, kneel to implore thee—
With Indian awe he seeks relief,
In pouring homage out before thee;
And I too, feel my reverance wake,
As gazing on our own broad lake!

I cannot feel as I *have* felt
When life with hope and fire was teeming
Nor kneel as I have often knelt
At beauty's shrine, devotedly dreaming.
Some younger hand must strike the string,
To tell of Huron's awful grandeur,
Her smooth and moonlit slumberings,
Her tempest voices loud as thunder;
Some loftier lyre than mine must wake,
To sing our own broad, gleaming lake!

T. MACQUEEN.

July 9, 1849.

DOCTORS EASY AND FUSSEY.

There shall be (it is observed in the natural history of Humbugs,) two men, Doctors, for example, of equal learning and skill: they are on the look out for a practice. Dr. Easy puts his name on a brass plate on the door, and then sits down in his drawing room to wait for patients. Need I say that he has generally to want a long time. But Dr. Fussey does not approve of the passive system. He starts a brougham before he has a visit to make in it.—He hires people to alarm all the neighborhood with peals of his surgery bell. He is continually being called out of church, and has once ventured on having his name shouted as being immediately wanted, while attending a religious meeting at Exeter-hall. Not a form of advertisement—barring those which pay the duty—does Dr. Fussey neglect, and the odds are in the end that he is making £1,000 a-year,

before Dr. Easy has heard the rat-tat at the door of his first patient. Now, perhaps, Dr. Fussey may, of the two, be the humbug; but I very much question whether he is the fool.—What applies to these two Doctors, applies generally to every trade and profession under the sun. Barring a lucky chance now and again, an adventurer will find that in the Battle of Life every man must be his own trumpeter. Sound your own charge and ride over every body, or somebody else will sound his charge, and ride over you.

THE INVITATION.

My wealth is in a little cot,
Which stands upon a meadow floor
Close by a brook: the brook is small,
But cannot clearer be, I'm sure.

A tree stands near the little cot,
Which for its boughs is scarcely seen;
And against sun, and cold, and wind,
It shelters those that dwell therein.

And there a pretty nightingale
Sings on the tree so sweet a song,
That every passing traveller stands
To listen, ere he speeds along.

Thou little one, with sunny hair,
Who long hath blest my humble lot—
I go—rough blows the stormy wind—
Wilt thou with me into my cot?

The hours of a wise man are lengthened by his ideas, as those of a fool are by his passions. The time of the one is long, because he does not know what to do with it; so is that of the other, because he distinguishes every moment of it with useful or amusing thoughts; or in other words, because the one is always wishing it away, and the other always enjoying it.

"We must adopt the Thomsonian remedial agents, or loose our practice. I have used Steam, Cayeane, and lobelia, and found them to be useful remedies to remove disease.—*Prof. M'Clellon.*

MECHANISM OF THE HUMAN SKELETON.

There is scarcely a part of the human body, or an action which it performs, or an incident that can befall it, or a piece of professional assistance which can be given to it, that does not furnish illustration of some truth of natural philosophy; but we shall here only touch upon as many particulars as will make the understanding of others easy. The CRANIUM or SKULL is an instance of the arched form, answering the purposes of giving strength.—The brain, in its nature, is so tender, or susceptible of injury, that slight local pressure disturbs its action. Hence a solid covering, like the skull, was required, with those parts made stronger and thicker which are most exposed to injury. An architectural dome is constructed to resist one kind of force only, always acting in one direction, namely, gravity; and therefore its strength increases regularly towards the bottom, when the weight and horizontal thrust of the whole are to be resisted; but, the tenacity of the substance is many times more sufficient to resist gravity, and therefore aids the form to resist forces of other kinds, operating in all directions. When we reflect on the strength displayed by the arched film of an egg-shell, we need not wonder at the severity of blows the cranium can withstand.

Through early childhood, the cranium remains, to a certain degree, yielding and elastic; and the falls and blows so frequent during the lessons of walking, &c., are borne with impunity. The mature skull consists of two layers, or tables, with a soft diploe between them; the outer table being very tough, with its parts dovetailed into each other, as tough wood would be by human artificers, while the inner table is harder, and more brittle, (hence called vitreous) with its edges merely lying in contact, because its brittleness would render dovetailing useless. A very severe partial blow on the skull generally fractures and depresses the part, as a pistol bullet would; while one less severe, but with more extended contact, being slowly resisted by the arched form, often injures the skull, by what is correspondent to the horizontal thrust in a bridge,

and causes a crack at a distance from the place struck, generally half way round to the opposite side. Sometimes in a fall, with the head foremost, the skull would escape injury, but for the body, which falls on it, pressing the end of the spine against its base.

In the LOWER JAW we have to remark the greater mechanical advantage, or lever power, with which the muscles act, than in most other parts of animals. The temporal and masseter muscles pull almost directly at right angles to the line of the jaw, while in most other cases, as in that of the deltoid muscle lifting the arm, the muscles act very obliqely, and with power diminished in proportion to the obliquity. An object placed between the back teeth is compressed with the whole direct power of the strong muscles of the jaw; hence the human jaw can crush a body which offers great resistance, and the jaws of the lion, tiger, shark, and crocodile, &c. are stronger still. The teeth rank high among those parts of the animal body, which appear almost as if they were severally the fruits of distinct miraculous agencies, so difficult is it to suppose a few simple laws of life, capable of producing the variety of form so beautifully adapted to purposes which they exhibit. They constitute an extraordinary set of chissels and wedges, so arranged as to be most efficient for cutting and tearing the food,and with their exterior enamel, so hard, that, in early stages of society, teeth were made to answer many purposes for which steel is now used. It seems, however, as if the laws of life, astonishing as they are, had still been inadequate to cause teeth, ceased in their hard enamel, to grow as the softer bones grow, and hence has arisen a provision more extraordinary still; a set of small teeth appear soon after birth, and serve the child, until six or seven years of age; these then fall out, and are replaced by larger ones, which endure for life; the number being completed only when the man or woman is full grown, by four teeth, called wisdom teeth, because they come so late, which rise to fill up the then spacious jaw.

The SPINE OR BACK BONE has in its structure as much of beautiful and varied mechanism, as any single part of our wonderful frame. It is the central pillar of support, or great connecting chain of all the other parts; and it has, at the same time the office of containing within itself and of protecting from external injury, a prolongation of the brain, called the spinal marrow, more important to animal life than the greater part of the brain itself. We shall see the spine uniting the apparent incompatibilities of great elasticity, great flexibility in all directions, and strength both to support a load, and to defend its important contents.

ELASTICITY.—The head may be said to rest on the elastic column of the spine, as the body of a carriage rests on its springs. Between each two of the twenty-four vertebræ, or distinct bones, of which the spine consists, there is a soft elastic intervertebral substance, about half as bulky as a vertebra, yielding readily to any sudden jar; and the spine, moreover, is waved or bent a little, like an italic *f* as seen when it is viewed sideways; and, for this reason also, it yields to any sudden pressure, opperating from either end. The bending might seem a defect in a column intended to support weight; but the disposition of the muscles around is such, as to leave all the elasticity of the bend and a roomy thorax, without any diminution of strength.

FLEXIBILITY.—The spine may be compared to a chain, because it consists of twenty-four distinct peices, joined by smooth rubbing surfaces, so as to allow of motion in all directions; and a little motion, comparatively, between each two adjoining pieces,becomes a grea extent of motion in the whole line. Thet articulating surfaces are so many, and so exactly fitted to each other, and are connected by such number and strength of ligaments, that the combination of pieces is really a stronger column than a single bone of the same size would be. The strength of the spine, as a whole, is shown in man's easily carrying upon his head a weight heavier than himself, while each separate vertebræ is a strong irregular ring, or a double arch, surrounding the spinal marrow. The spine inereases in size towards the bottom, in the justest proportion, as it has more weight to bear.

Attached to twelve vertebræ in the middle of the back are the RIBS, or bony streatchers of the cavity of the chest, constituting a structure which solves, in the most perfect manner, the difficult mechanical problem of making a cavity, with solid exterior, which shall yet be capable of dilating and contracting itself. Each pair of corresponding ribs may be considered as forming a hoop, which hangs obliquely down from the place of attachment behind; so that, when the fore part of all the hoop is lifted up by the muscles, the cavity of the chest is enlarged.

The SHOULDER JOINT is remarkable for combining great extent of motion, with great strnegth. The round head of the shoulder bone rests upon a shallow cavity in the shoulder blade, that it may turn in always; and the danger of dislocation from this shallowness is guarded against by two strong bony projections above and behind. To increase the range of motion to the greates possible degree, the bone called the shoulder blade, which contains the socket of the arm, slides about itself upon the convex exterior of the chest, having its motion limited only by a connexion through the collar bone, or clavicle, with the sternum. The scapula, or blade bone is extriordinary as an illustration of the mechanical rules for combining lightness with strength. It has the strength of the arch from being a little concave, and its substance is chiefly collected in its borders and spines, with thin plates between, as the strength of a wheel is collected in its rim, and spokes, and nave. The bones of the arm, considered as levers, have the muscles which move them attached very near to the fulcra, and very obliquely; so that, from working through a short distance comparatively, with the resistance overcome at the extremities, the muscles require to be of great strength. It has been calculated that the muscles of the shoulder joint in the exertion of lifting a man upon the hand, pull with a force of two thousand pounds. The os humera, or bone of the upper arm; is not perfectly cylindrical; but, like most of the other bones which are called cylindrical, it has ridges to give strength.

The ELBOW JOINT is a correct hinge, and so strongly secured, that it is rarely dislocated without fracture. The fore arm consists of two bones, with a strong membrane between them. Its great breadth, from this structure, affords abundant space for the origin of the many muscles thot go to move the hand and fiingers; and the very peculiar mode of connexion of the two bones, gives man that most useful faculty of turuing the hand round, into what are called the positions of pronation and supination, exemplifiied in the action of twisting, or of turning a glimblet The many small bones which form the WRIST have a signal effect of deadening, in regard to the parts above, the shocks or blows which the hand receives. The anular ligament is a strong band, passing round the joints and keeping all the tendons which pass from the muscles above to the fingers, close to the joint. It answers the purpose of so many fixed pulleys, for directing the tendons; without it, they would all, on action, start out like bow-strings, producing deformity and weakness. The human hand is so admirable, from its numerous mechanical and sensitive capabilities, that an opinion at one time commonly prevailed, that man's superior reason depended on his possessing such an instructer and such a servant. Now, although reason, with hoofs instead of fingers, could never have raised man much above the brutes, and probably could have not secured the continued existence of the species, still the hand is nothing more than a fit instrument of the god-like mind that directs it.

The PELVIS, or strong irregular ridge of bone, on the upper edge of which the spine rests, and from the sides of which the legs spirng forms the centre of the skeleton. A broad bone was wanted here to connect the central column of the spine with the lateral column of the legs; and a circle was the lightest and strongest. If we attempt still further to conceive how the circle could be modified to fit it for the spine to rest on, for the thighs to roll in, for the muscles to hold by, both above and below, for the person to sit on, we shall find, on inspection, that all

our anticipations are realized in the most perfect manner. In the pelvis, too, we have the thyroid hole and ischiatic notches, furnishing subordinate instances of contrivance to save material weight; they are merely deficiencies of bone, where solidity could not have given additional strength.

The HIP JOINT exhibits the perfection of the ball and socket articulation. It allows the foot to move round in a circle, as well as to have the great range of backward and forward motion, exhibited in the action of walking. When we see the elastic, tough smooth cartilage, which lines the deep socket of this joint, and the similar glistening covering of the ball or head of the thigh bone, and the lubricating synovia poured into the cavity, by appropriate secretories, and the strong ligaments giving strength all around we feel how far the most perfect of man's works fall short of the mechanism displayed by nature.

The THIGH BONE is remarkable for its projections, called trochanters, to which the moving muscles are fixed, and which lengthen considerably the lever by which the muscles work. The shaft of the bone is not straight, but has a considerable forward curvature. Short sightedness might suppose this a weakness, because the bone is a pillar supporting a weight; but the bend gives it, in reality, the strength of the arch, to bear the action of the mass of muscle called vastus, which lies and swells upon its fore part.

The KNEE is a hinge joint of complicated structure; and it claims the most attentive study of the surgeon. The rubbing parts are flat and shallow, and therefore the joint has little strength from form; but it derives security from the numerous and singularly strong ligaments which surrond it. The ligaments on the inside of the knees resemble, in two circumstances the angular ligaments of joints, namely in having a constant and great strain to bear, and yet in becoming stronger always as the strain increases. The line of the leg, even in the most perfect shape, bends inward a little at the knee, requiring the support of the ligaments, and in many peons it bends so very much: but the inclination does not increase with age. The legs of many weakly in-kneed children become straight by exercise alone. This inclination at the middle of the legs, by throwing a certain strain on the ligaments, gives an increase of elasticity to the limb, in the actions of jumping, running, &c. In the knee there is a singular provision of hose cartilages, which have been called friction cartilages, from a supposed relation in use to friction wheels; but their real effect seems to be to accomodate, in the different positions of the joint, the surfaces of the rubbing bones to each other. The great muscles on the fore part of the thigh are contracted into a tendon, a little above the knee, and have to pass over and in front of the knee, to reach the top of the leg. where their attachment is. The tendon, in passing over the joint, becomes bony, and forms the patella, or knee pan, often called the pulley of the knee. This peculiarity enables the muscles to act more advantageously by increasing the distance of the scope from the centre of motion. The patella is, moreover a sort of shield or protection to the fore part of this important joint. The leg below the knee, like the fore arm already described, has two bones. They offer spacious surface of origin for the numerous muscles required for the feet; and they form a compound pillar of greater strength than the same quantity of bone, as one shaft would have had. The individual bones also, are angular, instead of round, hence deriving greater power to resist blows, &c.

The ANKLE JOINT is a perfect hinge of great strength. There is in front of it an anular ligament by which the greater part of the tendons passing downwards to the foot and toes, are kept in their places. One of these tendons passes undert he bony projection of the inner ankle, in smooth appropriate grove, exactly as if a little fixed pulley were there. The heel by projecting so far backwards, is a lever for the strong muscles to act by, which from the calf of the leg, and terminate in the tendo achillis. These muscles, by drawing at it, lift the body, in the actions of standing on the toes, walking, dancing, &c. In the foot of the negro, the heel is so long as to be ugly, in

European estimation; and, its great length rendering the effort of small muscles sufficient for the various purposes, the calf of the leg in the negro is smaller in proportion, than in other races or men.

The ARCH OF THE FOOT is to be noticed as another of the many provisions for saving the body from shocks, by the elasticity of the supports. The heels and the balls of the toes are the two extremeties of the elastic arch, and the leg rests between them. Connected with elasticity, it is interesting to remark how imperfectly a wooden leg answers the purpose of a natural leg. With the wooden leg, which always remains of the same length, the centre of the body must describe at each step, a portion of a circle of which the bottom nob of the leg is the centre, and the body is therefore constantly rising and falling; while with the natural legs, which, by gentle fleure at the knee are made shorter or longer in different parts of the step, as required, the body is carried along in a manner perfectly level. In like manner, a man riding on horseback, if he keep his back upright and stiff, is jolted by every step of the trotting animal; but the experienced horseman even without rising in the stirrups, by letting the back yield a little at each movement, as a bent spring yields during the motion of a carriage, can carry his head quite smoothly along. In a general review of the skeleton, we have to remark—

1, The nice adaption of all the parts to each other, and to the strains which they have respectively to bear; as in the size of the spinal vertebræ increasing from above downwards, the bones of the leg being larger than those of the arm, and so on.

2, The objects of strength and lightness combined, as by the hollowness of the long bones; their angular form, their thickening and flextures in particular places where great strain has to be borne; the enlargement of the extremities to which the muscles are attached, lengthening the lever by which these act.

3, We have to remark the nature and strength of material in different parts, so admirably adapted to the purposes which the part serve. There is a bone, for instance, in one place, nearly as hard as iron, where, covered with enamel, it has the form of teeth, with the office of chewing and tearing all kinds of matter used as food. In the cranium, again, bone is softer, but tough and resisting: in the middle of long bones, it is compact and little bulky, to leave room for the swelling of the muscles lying there; while at either end, it is large and spongy, with the same quantity of matter, to give a broad surface for articulation; and, in the spine, the bodies of the vertabræ, which rest on an elastic bed of intevertebral substance, are light and spongy, while their articulating surfaces and processes are very hard. In the joints we see the tough, elastic, smooth substance, called cartillage, covering the ends of the bones, defending and padding them, and destroying friction, In infants, we find all the bones soft or grisly, and therefore calculated to bear, with impunity, the falls and blows unavoidable at their age; and we see certain parts remaining cartillage or gristle for life, where their elasticity is necessary or useful, as at the anterior extremity of the ribs. About the joints we have to remark the ligaments, which bind the bones together, possessing a tenacity scarcely equalled, in any other known substance; and we see that the muscular fibres, whose contractions move the bones, and thereby the body—because they would have made the limbs clumsy even to deformity, had they all passed over the joints to the parts which they have to pull—attach themselves, at convenient distances, to a strong cord called a tendon, by means of which, like a hundred sailors at a rope, they make their effort effective at any distance. The tendons are remarkable for the great strength which resides in their slender forms and for the lubricated smoothness of their surfaces. Many other striking particulars might be enumerated; but these may suffice.

Such, then, is the skeleton, or general framework of the human skeleton—less curious and complicated, perhaps, than some other parts of the system, but so perfect and so wonderful, that the mind which can attentively consider it without emotion, is in a state not to be envied. The living force of man has been used as a working power in various ways, as

in turning a winch, pulling at a rope, walking in the inside of a large wheel to move it, as a squirrel or turnspit dog moves his little wheel, &c. Each of these has some particular advantage; but that made in which, for many purposes, the greatest effect may be produced, is for the man to carry up to a height his body only, and then to let it work by its weight in descending. A brick-layer's laborer would be able to lift twice as many bricks to the top of a house in the course of a day, by ascending a ladder without a load, and raising bricks of nearly his own weight over a pulley each time in descending, as he can by carrying bricks and himself up together, and desending, again without a load, as is still usually done. Reflection would naturally anticipate the above result, independantly of experiment; for the load which a man should be best able to carry, is surely the one from which he can never free himself, the weight of his own body.

Accordingly, the strength of muscles and disposition of parts, are all such as to make his body appear light to him. The question which was agitated with such warmth some time ago, as to the propriety of making men and women work on the tread-mill, receives an easy decision here. They work by climbing on the outside of a large wheel, or cylinder, which is turned by their weight; and on which they must advance just as fast as it turns, to avoid falling from their proper situation. There are projections or steps for the feet on the outside of the cylinder, and the action of the workers is exactly that of ascending an acclivity. Now, as nature has fitted the human body for climbing hills, as well as for walking on plains, the work on the tread-mill, under proper restrictions as to duration, must be as natural and healthful as any other. Its effects have now proved it to be so. As animal power is exhausted exactly in proportion to the time during which it is acting, as well as in proportion to the intensity of force exerted, there may be often a great saving of it by doing work quickly, although with a little more exertion during the time. Suppose two men of equal weight to ascend a stairs, one of whom takes only a minute to reach the top, and the other four minutes; it will cost the first but a little more than a fourth part of the fatigue which it cost the second, because the exhaustion has relation to the time during which the muscles are acting. The quick mover may have exerted perhaps one-twentieth more force in the first instant, to give his body greater velocity, which was afterwards continued; but the slothful mover supported is load four times as long.

A healthy man will run rapidly up a long stairs, and his breathing will scarcely be quickened when he arrives at the top; but if he walk up slowly, his legs will feel fatigued, and he will have to wait some time before he can speak calmly. For this same reason, coach-horses are much spared by being made to gallop up a short hill, and being then allowed to go more slowly for a little time, so as to rest at the top. The rapid waste of muscular strength which arises from continued action, is shown by keeping the arm extended horizontally for some time: few can contine the exertion beyond a minute or two. In animals which have long horizontal necks, there is provision of nature in a strong elastic substance on the back or upper part of the neck, which nearly supports the head, independently of muscular exertion.

ROBINSON'S LECTURES.

LECTURE VI.

THE THEORIES OF DRS. BROWN, RUSH AND THOMPSON.

It was observed by the ancients, as an argument for the duration of the soul, that this state did not appear to be the final residence of any portion of its inhabitants: That all nature was in progressive motion; evidently hastening forward to some far distant centre, where it should attain the perfection of its being, and the consummation of that excellence for which the Deity had designed it.

If we apply this argument to the progress and revolutions of medicine, we may anticipate, with joyful hearts, that the perfection of its scienc, is nigh at hand. In tracing its history, we find that almost every new professor comes forward with his new *theory*, and his proscription of his predecessors. Those inces-

sant revolutions must ultimately terminate: And we most ardently hope, *that end* may be perfect knowledge, in the completion of the system; that simplicity and success, a fixed and permanent mode of practice, may be universally adopted; and the wavering and contending systems be banished from the earth.

I know it has been said, in defence of this perpetual change, that every science around which *new facts* are daily accumulating, requires, from time to time, an entire reform and renovation. But that this reform and renewal of the whole system of medicine, from age to age, should be accounted for, merely by the "accumulation of facts," and not the perversity of principles, I apprehend, will not bear the test of sound argument. Other sciences, as well as *medicine*, have been changed often; but it was professedly because their former principles were false, and not derived from facts, from experience, and observation: and not on account of the accumulation of facts, which only serve to confirm right principles.

The symptoms, of malignant and inflammatory fevers, appear to be the same now, that they were in the days of Hippocrates; and yet how various has been the treatment since that time.

There must be *first principles* in medicine as well as in philosophy, which are invariable and incontestible; which, like the stars of the firmament, in guiding the mariner, will conduct the physician, with assured aim, through the deep ocean of human troubles. When learning revived, the physicians of Europe employed themselves in reviving the system of Galen and Hippocrates. During the course of the sixteenth century, the study of the physicians was almost solely employed in explaining and confirming that system. Early in the same century, the noted Paracelsus had laid the foundation of a chemical system, which was in direct oppsition of that of Galen. This system finally prevailed over the Galenists. But though opposed and contending, the explanations of both, of the phenomena of health and sickness, turned so entirely on the state of the fluids of the body, that a humoral and chemical pathology prevailed, sometimes together, and sometimes apart, down to the end of the seventeenth century; and even to the end of the eighteenth, had a great share and influence on the practice of medicine.

In the begining of the eighteenth century Stahl, Hoffman, and Boerhaave, produced three new and different systems of physic, and mixed up their doctrines of *spasm*, of *morbid acramonics*, of *vis naturæ conservatrix*, with the humoral pathology of Riverus, and the chemical affinities and repulsions of Paracelsus. But the *Autocratcia*, says Dr. Cullen, obtained and admitted, in some shape or other, by every sect, had corrupted the practice of all physicians, from Hippoerates to Stahl. This is a sweeping sentence, pronounced upon the *anima medica*, by the good doctor of Edinburgh. And his own *Nosology*, has received one more severe and decisive from the pen of Rush.

"*Sic transit gloria mundi!*" * is forced upon us as we pass along this boisterous stream of conflicting pathology. And where, alas, shall we find rest! on what rock shall our feet settle! where shall the lovely, fleeting form of happiness be found! Some of the latter philosophers of Greece, hardened and confounded by the disputes of the schools, took refuge in an universal scepticism. But let us not, my friends, despair amdist the glooms of the thickening tempest. The day will dawn and brighten, the storm shall pass away, and the bright sun of healing splender, shine upon the world.

From the simple solids, in their state of rigidity or laxity, as a doctrine accounting for health or disease, by Dr. Boerhaave, Dr. Cullen passes off to the *solidum vivum*; and expresses his confidence, that he had seized on a clue of investigation, in laying hold of the motions and moving powers of the animal economy, more certain to detect the causes and phenomena of disease, than ever had been before discovered; for, although Hoffman had dipt into this fundamental spring of the science, he had also polluted it with his mixture of the humoral pathology.

* Thus fades the systems and glory of the world.

The value of Dr. Cullen's researches, we will soon perceive, in the investigations, of Brown; and Dr. Thompson himself, was never more puzzled and confounded, when he had to contend alone with the whole faculty, than Dr. Brown appears to have been, in throwing off the entanglements of Cullen's system. He studied under Cullen; he lived in his family; and he lectured on his system. But I shall give the history of his scientific progrees; in his own words. "The author, says Brown in the preface to his works, the author of this work has spent more than twenty years in learning, teaching, and scrutinizing every part of medicine. The first five years passed away in hearing others, in studyidg what I had heard and implicitly believing it, and entering upon the possession, as a rich and valuable inheritance. The next five years I was employed in explaining the several particulars, in refining them, and bestowing on them a nicer polish. During the five succeeding years, nothing having prospered according to my satisfaction, I grew indifferent to the subject; and, with many eminent men, and even the very vulgar, began to deplore the healing art, as altogether uncertain and incomprehensible." You have here, my friends, the decision of this original mind, on the imperfection of a system that had been progressing for four thousand years. "All this time passed away, says Dr. Brown, without the acquisition of any advantage, and without that, which, of all things, is the most agreeable to the mind, the *light of truth;* and so great and precious a portion of the short and perishable life of man was totally lost!—Here I was, at this period, in the situation of a traveller in an nnknown country, who, after losing every trace of his way, wanders in the shade of night. Nor was it until between the fifteenth and twentieth years of my studies, that a faint gleam of light broke in upon my soul."

Dr. Brown then proceeds to detail the cause of this new beam of light which broke in upon him. He had an attack of the gout, in the thirty-sixth year of his age; his mode of living had been generous until the six months previous to his fit of the gout, during which time he had used the most sparipg diet. The disease spent its force in six weeks, and did not return until after an interval of six years, and an abstemious diet of six months.

The theory of the physicans was, that the gout was caused by plethora and excessive vigor. Vegetable aliment was enjoined as the only mode of cure. The rationale from the cure to the proximate cause, was certain; but Dr. Brown discovered that the error lay in the proximate cause and of course must defeat the remedy. For during a whole year of strict adherence to the prescribed regimen,he suffered four severe attacks. In short,he says, the whole year except fourteen days, was spent between limping and excruciating pain. Upon this experience, and these facts, he constructed his new theory. Why, when he lived well was he exempted from the disease, and when dieting himself was he attacked in a manner so formidable and unrelenting? The solution of these questions opened his eyes, and led him forward to an inquiry more comprehensive.—What is the effect of food, drink and the aliment which support life? They produce strength. What is their effect afterwards? Always less and less. What is it towards the end of life? So far from giving strength, they prove weakening. And finally, the very powers which support life at first, prove its destruction at last; but generally through the intervention of disease.

From this process of reasoning, he perceived that his disease was occasioned by a deficiency and not a redundancy of blood; that debility was the cause of his disorder, and the remedy must be sought in a sustaining and stimulating diet; this he called *direct debility.* Such was the success of this new practice, that for two years he had only a very slight attack; and this soon yielded to increased stimuli. He computed from these data, that the disease was alleviated in the proportion of forty-eight to one. A young gentleman living with the doctor at the same time, and suffering under asthma, in consequence of the same treatment, had only one fit in two years, instead of one every day, while he pursued the common practice. This mode of practice he found success-

ful, in the putrid and gangrenous sore throat, in rheumatalgia, inflammation of the joints and all chronic rheumatism, and the inflammation which attacks the brain after typhus fevers; dyspepsia, convulsions, and the diseases of children. All these, yielding to the stimulating medicine, he concluded they were asthenic. For seven years he was able to repel the fits of the gout by this mode of practice.

Led by the hand of nature, the doctor says, he walked round the whole circle of asthenic diseases, and found that they were all cured by the same remedy, stimulants.

With regard to the sthenic diseases, the cause and cure of which he says, nobody understood, all their symptoms were mistaken, and the practice wrong. I will, once for all, explain these terms of the Brunonian system.

Sthenic diathesis; diseased habit of body, occasioned by excess of stimuli, called indirect debility; oppressed state of the system.

Asthenic diathesis; diseased habit of body, occasioned by a deficiency of stimuli, called direct debility; exhausted state of the system.

The former was to be reduced by depletion; the latter by repletion. The Egyptians, in the corn country, purged and vomited themselves every month, three days in succession, notwithstanding they were the healthiest people in the world.

Dr, Brown reduced all general or universal diseases to these two forms, *sthenic* and *asthenic;* enlarged his plan, accounted for the symptoms and reduced the whole to a certain principle. An universal disease, he says, proceeds from an affection of the principle of life; but a local disease from a local injury. These three states, *health, disease,* and *predisposition*, constituted the life, or living state of animals. From thus ascribing all diseases to *excess or deficiency*, he directed his remedies to the reverse states of the body, and showed that the noxious powers which excited either, were the remedies of the other. He laid down the same doctrine in regard to plants; and finally demanded, whether the medical art, hitherto *conjectural incoherent*, and in the great body of its doctrines false, was not at least reduced to a science of demonstration, which might be called THE SCIENCE OF LIFE? A question which has been answered in the affirmative, says his biographer, by every one who has been at due pains to understand the doctrine.

BROWN'S THEORY.

1st. To every animate being is allotted a certain portion of the principle on which the phenomena of life depend. This principle is denominated *excitability.*

2d. The exciting powers are the external and internal stimuli. The former are heat, food, wine, poisons, contagions; the latter, the functions of the body itself, contractibility, thought, emotion and passion.

3d. Excitement is the *effect* produced by the action of the exciting powers on excitability.

4th. Life is a *forced* state; if the exciting powers are withdrawn, death ensues, as certainly as if the excitability was gone.

5th. By too great excitement, weakness is produced, because the excitability becomes defective. This is *indirect debility.* When the exciting powers are withheld, weakness is also induced, and this is *direct debility.* Here the excitability is in excess. *Ergo*, when the excitability is *defective*, it produces *indirect* debility; but when the excitability is in *excess* it then produces *direct* debility.

6th. Every power that acts on the living frame is a stimulant.

7th. Excitability is seated in the medullary portion of the nerves, and in the muscles.

Dr. Christie has illustrated this theory of Dr. Brown, by a familiar similitude. Suppose a fire to be made up in a grate filled with fuel, not very combustible, and a machine placed before it, containing several tubes pouring fresh air upon it. Suppose another pipe, fixed at the back of the grate, through which a constant supply of fresh fuel was poured into it, to supply the waste occasioned by the flame.

The grate is the human frame; the fuel in it, the matter or principle of life; the excitability of Dr. Brown and the *sensorial power* of Dr. Darwin. The pipe behind the grate pouring in fuel, is the power of the living system to regenerate itself, or re-produce excitability;

the air machine with several tubes, is the various stimuli, acting on the body, and the flame is the phenomenon of life.

Thus the curious and comprehensive system of Dr. Brown, is summed up briefly in this similitude; to which is added this further illustration: As life is a forced state, according to the doctor, it is said, where one tube of the machine pours in pure air; this signifies the highest degree of stimulants; when common atmospheric air, the common stimulants of food, drink, &c.; and when impure air, it indicates the sedative powers, as poisons, putrefactions, marsh miasmata, foul air, stagnant water, &c. From these few examples, it will be easy to comprehend Brown's Theory. The more a spark is blown, the brighter it burns, and the sooner it is spent. This sage saying exemplifies what is remarked by Dr. Brown, when he affirms that the stimulating powers support life, and at the same time consume it, because they waste the excitability; therefore, the necessity of sleep, when all the exciting powers are withdrawn, to give the living principle time to accumulate its excitability.

In a very few years, notwithstanding the opposition made to Brown's theory, it spread with rapidity over England, France, Italy, Germany, Holland, and America. Even those who rejected his doctrine, were nevertheless influenced and benefitted by his practice. It has been so with Dr. Thomson. The vapor bath was a poor attempt to devise a substitute for his method of steaming.

When Lavoisier first announced his system, the Chemists who were the most scandalized by it, found themselves obliged to reverse their whole congeries of facts and deductions. The immediate consequence was, an entire change in their opinions. They were forced to shift their foundations; and though they disdained to go over to Lavoisier, they could no longer adhere to Stahl. They were obliged to abandon half their errors, and no doubt a thorhugh lustration in medicine will be forced upon the faculty, by the curious discoveries of these latter years.

DR. RUSH'S THEORY.

With Brown, he affirmed, 1st. *Life* to be a forced state.

2nd. Life, as applied to the human body, included *motion*, *heat*, *sensation* and *thought*; these four, when united, compose perfect life.

3rd. Every part of the human body, nails and hair excepted, is endowed with sensibility and excitability. *Sensibility* means, the power of having sensation excited by the action of impressions; *excitability*, the power of having motion excited by means of impressions.

4th. The human body is so formed, that if impressions be made upon it, in its healthy state, in one part, it will excite sensation, or motion, or both, in every other part; hence, the body is a unit; ergo, diserse a unit.

5th. Life is the effect of stimuli acting on the *excitability* and *sensibility*, which are extended in different degrees over every part of the body.

Dr. Rush agrees with Dr. Brown, that life is a forced state, and the effect of stimuli. He divides these the same as Brown, into external and internal. But for the matter or principle of life itself, he adds sensibility to Brown's excitability. He will not admit with Brown, that debility is disease, but only a predisposing cause of disease.

Disease consists in a morbid excitement, and the cure of diseases consists in restoring the equal diffusion over the whole body. He blames Cullen for inducing his students by his nosology, to prescribe for the names of diseases instead of their proximate causes; and Brown, he affirms to be equally faulty, for reducing them nearly to one class, and accommodating his prescriptions to the reverse states of the body, or to that which constitutes their proximate cause.

Air, by exciting respiration, gave the first impulse of life. When man was formed, God breathed into him the breath of life, that is, says the doctor, atmospheric air; dilating his nostrils, inflating his lungs, and thus excited in him the whole phenomena of animal, intellectual and spiritual life. And hence, life is the effect of stimuli acting on an organized body.

DR. THOMSON'S THEORY.

All bodies are composed of the four elements, *earth*, *air*, *fire* and *water*. Earth and water constitute the solids, and air and fire, the fluids, of the body. The healehy state consists in the proper balance and distribution of these four elements, and disease by their disarrangement. All disease is caused by obstruction; the mode of cure is to remove it by diffusing heat over the system, for *heat* is life, and *cold* is dehth. All disease is the effect of one general cause, and therefore requires a general remedy. Whatever supports the internal heat and directs the determining powers to the surface, will expel the disease, and save the patient.

Through the long experience of thirty years Dr. Thomson thinks he has discovered those medicines and that mode of practice, which will accomplish this object. He has tried them on the most hopeless cases, and still found them effectual. Indeed such was the nature of his trials and difficulties, that he was only called in to the aid of the patient, when given over to death by the other physicians. The progress of his skill was therefore *tested* by a succession of the most desperate and deadly maladies.

If it be objected to his system, that the four elements composing the human body, are not a correct enumeration of primary substances, I reply that it is the most simple, obvious and ancient distribution of the primary elements. It was Aristotle's division, and that of many other celebrated philosophers. Indeed, it is not long since the physiologists and chemists began to add to the number of primary elements. From seven to nine, and forty-six, they have summed up the number at different times; but they are not now sure whether this last number should be enlarged or diminished. Indeed, they confess that the real, simple, elementary principles of matter, will never be discovered. The natural division of Thomson, made in times of old, answers all the purposes of his system, and the operations of the healing skill.

The assertion, that *heat* is *life*, is, at least, equally as philosophical as the affirmation of Dr. Rush, that *motion*, *heat*, *sensation*, and *thought*, when united, compose perfect life.—His cause of disease, being ascribed obstruction, seems to amount to the same as Dr. Rush's morbid excitement; and that *cold is death*, is about equal to the extinguished excitability of Dr. Brown.

The conclusion of the whole matter, is, that Dr. Brown perceived, that the systems of medicine were too complicated, and therefore uncertain and false in many of their principles. He, by a close attention to facts in his own case, discovered a method of curing disease, at once simple and comprehensive, extending to all cases. Dr. Rush understood well, the value of this new mode of reasoning, and though he has added sensibility to the system, he has not much improved it. Brown is more philisophical than Rush, for he gives the principle of life merely a name, which serves his purpose, excitability, without pretending to say what it is, whether a substance, or quality of substance. He says it is a somewhat, which he cannot pretend to explain. And this is surely better than to make life the mere effect of the united action of organization and stimuli.

Dr. Thomson might only intend, like Dr Brown, to express by the phrase, *heat is life*, the unknown *somewhat* which he could not describe; and, that *cold is death*, he might only mean an effect of death. *Cold*, is generally considered a negative term, to express the absence of heat. Dr. Ray says, it is the effect of a condensed or cold ether, from which heat has been expelled. Plato calls it a fluid of gross particles, which presses upon and stops the pores of bodies, exeluding heat. Life is a metaphysieal subject, and cannot be investigated by the laws of physics. This preposterous mode of reasoning has led to all the absurdities uttered on this sublime theme.

Dr. Thompson, in calling *heat* life has more philosophy on his side than people imagine, or than even he himself is aware of. *Light*, *heat* and *fire*, are only the same substance, in different states or conditions, and acting in a different manner. They are all signified by the same word in Hebrew and Greek, and also in

the Latin. "Some of the ancients affirmed, that light gave an organization, sensation, and thought, to the primitive chaos, and is the pabulum of all living things. It is the purest, brightest and most beautiful of all that we behold, of the works of the Creator." Plato, in Timæus, asserts that fire and heat beget and govern all things. He accounts for the animal functions, from air and fire joined, acting through the whole body; fire expanding within and fire compressing without. The Abbe le Pluche says, there are but three fluids, which by their continual activity, cause all motion; these are *fire, light air;* and they are the breath of life. These active agents the heathen held to be intelligent, and the gods that govern the world. Fire and air, they call the active moving powers, and earth and water the passive elements.

These opinions correspond with Dr. Thomson, who thinks with them, that the circulation of the blood is caused by the expanding power of heat within, and the compression of air without. The activity he has assigned to them agrees with the most reputed systems of ancient philosophy. An egg cannot hatch, says Dr. Ray, without air and heat. They have absolute dominion over all things. The circulation of the blood is from internal heat, and external air pressing into the lungs, they serve as a pump to draw the blood from the heart, and the air keeps this pump in motion. The air is to the body, what the weight is to a clock, and the heart with its valves, as a pendulum to regulate its motions.

We now perceive, from these few examples of ancient and modern opinions, and they might be greatly enlarged, that Dr. Thomson has not given too much importance to heat and air, in his theory; or if he has erred, it is in great society, and with long established maxims of profound reason, and careful observation.

Dr. Thomson says, food and medicine are in harmony with each other; they grow in the same field, and are gathered by the same people. Dr. Ray remarks, we derive our food from the surface of the earth, and it also contains our principal medicine.

In accordance with the sentiments of the philosopher, on the beneficial results of misfortune, Dr. Thomson was forced into his career of medicine, and pressed forward till triumph crowned his struggles, and wealth repaid his toil; from the vale of obscurity he has risen to take his rank among the benefactors of the world.

UNFETTERED CANADIAN.

TORONTO, JUNE, 1849.

Continuation of the Discussion between N. B. Wolfe, M. D. and the Editor.

LETTER I.

TO ROBERT DICK ESQ.:

Respected Sir,—The fifth No. of the *Unfettered Canadian* has been duly received, in which I find, you have opened the discussion of the question:

"If the restrictive laws which now protect the medical profession, were removed, would society at large be benefitted?"

The above question was submitted to you, with my written declaration, that I was prepared to sustain the negative of the argument through the medium of any press that would grant the use of its columns. I still hold myself in readiness to make good that declaration, and if Mr. Dick is to be my antagonist, we must have an adjustment of the "Rules" that are to govern the discussion.

Your note, responsive to a note dated, August 1st, contains the following statements: 1st, "I pledge myself to publish your productions, so long as three doctors of your profession, sustainting an honourable reputation in society can be found to sanction them." 2nd. "I shall claim the right, however, of calling upon you to sustain the affirmative after the publication of your sixth communication, for an equal number of articles."

Now sir, have you accepted the proposition I made, and as it stands recorded in the *Unfettered Canadian?* If so, why have you placed me under the restraints of a Medical Board

of Examiners? What *special* right have they to determine whether my articles should be published or not? Their approbation! What right have you to exact such a compliance to a monopoly, which, if established, not only fetters the hands, but enslaves the noblest aspirations of emancipated mind! You affect a contempt for hoary-headed usages, and yet are the very first to offer an oblation at her shrine. I do not appear before your readers as the special pleader for the members of the Medical Profession. I do not address myself to them exclusively, knowing that but very few of the Faculty have had time to become acquainted with the existence of such a periodical as the *Unfetterd Canadian*. I do not assume the position of the apologist for any flagrancies that physicians may perpetrate, either in a professional or civil capacity; *nor do I write*, AS A PHYSICIAN, *in the pending controversy*.

But why "sustaining an honourable position in society?" Mr. Dick does little credit to his discrimination by noticing, in the manner he has, a man whose moral character and position in society is not a sufficient guarantee to publish any thing he may write, to which he may attach his name.

"A gentleman will not insult me, and no other can."

Then, sir, as an *Unfettered Canadian*, I cannot acquiesce to this requirement. What assurance have you given me that an inquisitorial committee will not be as necessary to approve your articles as mine. Why react this fortification if you are to meet me in single combat! Why place the quill in my hand and the sword in yours! No, sir! we cannot subscribe to, or tolerate, so far as our personal influence extends, any monopoly, be it political, moral, physical or medical, and with the statesman of his age, I declare, "*I have sworn upon the altar of God, eternal hostility to every form of tyranny over the mind of man.*"

But, secondly, "You claim the right of calling upon me for an equal number of articles, sustaining the affirmative of the question, after the publication of my sixth negative article."

Your claim is unjust (a) because I will not grant that *special* right, and (b) without my assent no such right exists; (c) to assume such *special* right conflicts with my natural rights, *ergo* (f) the claim is usurped and must be unjust. For the philosophy of this reasoning, see *Unfettered Canadian*, No. v. p. 116, col. 2 ph. 3.

In controversies, custom has established the principle, that the parties engaged must have a mutual understanding of what they are to discuss, and how they are to discuss. I have taken the negative of the question; and to ask me to change my position, is about as "*cool*" as Santa Anna's request to Gen. Taylor, asking him to surrender the field of Buena Vista, or that "ocean of polar icebergs" which you have invited us to navigate. I promise, however, to conform to your request when it is found to be to my advantage to do so; but, let this be understood, that "*I never surrender without a contest.*"

You now perceive, sir, that I object to your *two* requirements. 1st. Submitting my articles to a committee of physicians for approval; and secondly, taking the affirmative of the discussion for an equal number of articles that I may have written on the negative of the question. I would submit the following "Rules" to govern in the discussion of the question at issue,—in lieu of your requirerequirements; to which, if you approve or amend so as to make no material alteration of sense or import, attach your name, as I will attach mine.

1st. The question to be, "If the restrictive laws which now protect the medical profession were removed, would society at large be benefitted?"

2nd. No reflection is to be cast upon corps editorial, or, upon the members of the medical professions for any thing advanced by either of us as argument.

3rd. That whatever is written, shall be published, the writer alone being responsible for every thing which he may advance *or quote*.

4th. The readers of the *Unfettered Canadian*, to be the umpires, with whom the merits of the discussion is to rest.

5th. That when an argument is submitted to the umpires, after it has been reviewed, it is not again to be discussed or re-cited.

6th. That either party shall have the privilege of closing the discussion by giving notice to that effect, the opposite party having permission to write one article after said notice shall have been given.

7th. A synopsis of the arguments to be written out by both parties, after the close of the discussion, and published in the same number of the *Unfettered Canadian*.

Signed,

ROBERT DICK.
N. B. WOLFE.

I will proceed in my next letter to review the article in No. V. of your publication, and I hope sir to be able to show you that your position is weak and untenable; and your readers as integrals of the community, that there best interests are consulted by perpetuating the restrictive laws "which now protect the medical profession."—I would ask for a suspension of judgment until both parties shall have been heard, and I trust that no feeling of prejudice or rancour will be permitted to do injustice to an impartial investigation of the subject at issue.

With considerations of high regard
I am respectively
Your's &c.,
N. B. WOLFE.

Prince Albert, Reach,
Sept. 1st, 1849.

REPLY.

Our friend err's, in supposing that we intended, or wished, to submit all his articles to a board of inquisitors: indeed we never expected to have the *least occasion* to submit even one of them to such a board; feeling confident that nothing could proceed from his pen, which we could hesitate one moment to publish—what we said was designed wholly for his benefit—that he might be assured, that no cowardly advantage would be taken of the power which we hold as editor of the "U. C.", in closing its columns against his communications, when they became, to us, unanswerable. But surely no one will blame us for refusing to publish that, which three respectable men cannot be found to sanction. To satisfy Dr. Wolfe, however, that we intended no monopoly—that we ask no advantage—we cheerfully aggree, to publish nothing in this discussion, which we cannot find three respectable men to sanction.

Our friend's conception, or interpretation of our claiming the right to throw him on the affirmative after a certain time, is positively so ludicrous, as to put all gravity at defiance. We have labored hard to shun the conclusion, that the Dr. *really fancies*, that we actually expected him to turn round, and annihilate his own positions! To take the affirmative of the identical question, the negative of which, he had labored through six articles to establish as sound and true!!! This, he calls cool as the demand of Santa Anna at Buena Vista—Cooll we can assure our friend, that we feel it to be humiliating, and mortifying in the extreme, to have such consummate folly attributed to us.

Dr. Wolfe will doubtless admit that he ought to take our positions as we state them—that he should not find fault with what he has not read—for certainly a single glance at the passage will convince him, that he has committed a gross and ludicerous blunder; as it is utterly impossible to force from it, the meaning which roused his indignation. Here it is—"I shall claim the right, however, of calling upon you to sustain the affirmative, after the publication of your sixth communication for an equal number of articles; THE QUESTION TO BE—*Are the restrictive laws which now protect the medical profession, beneficial to society at large?* Why did our friend not discover that we had inverted the sides of his question? why did he not perceive that the negative in *his* question is the affirmative in ours? and that if *both* questions are discussed, he who takes the negative of the first, *must* take the affiirmative of the second, unless he abandons his own position and adopts that of his antagonist? all this our friend would have readily perceived, had he read our note with the least degree of attention—and that we had not the most distant intention of asking him to relinquish his opinions, or to "surrender without a contest"—that we only asked him to bear the "*burden of proof*"

in turn with us; by allowing the question to be changed at a certain stage of the discussion, so as to throw him on the affirmative; a request which we never knew a disputant to refuse. Should Dr. Wolf, however, refuse, we are quite willing to bear the burden of proof through the whole discussion, the proof being very easy, and the burden immeasurably lighter than that under which he will be compelled to struggle. We therefore cheerfully accede to his terms, we will publish all that he may advance, or quote, for which he can be held alone responsible. Our friend may therefore proceed, without further delay, to execute the singular task, of establishing the propriety of continuing to protect the Medical Profession while we can turn back, and read in his first letter, the following, attestation from his own pen,—"*We cannot subscribe to, or tolerate, so far as our personal influence extends, any monopoly, be it political, religious, moral, physical* or MEDICAL. *And with the statesman of his age I declare* 'I HAVE SWORN UPON THE ALTAR OF GOD, ETERNAL HOSTILITY TO EVERY FORM OF TYRANY OVER THE MIND OF MAN.'" We are all attention, to witness the skill and wisdom of the man, who can defend, with honor, a position so novel and startling.

MINUTES

Of the Provincial Medical Reform Convention, which met in the City of Kingston, Sept. 19th, 1849.

In pursuance of the call published in the fourth number of the "Unfettered Canadian," and also in hand-bills posted through the City, the Convention met as above stated, and organized by calling Dr. S. Gregory to the Chair, and appointing R. Dick, Secretary.

The Convention thus organized, *appointed* Drs. J. G. Booth, E. Ash, S. Gregory, and the Editor of the "U. C.," a Committee to prepare a draft of a constitution, in order to facilitate the organization of the contemplated Provincial Medical Society; and that Proffessor Potter, M. D., be requested to aid them by his suggestions.

Appointed, Drs. Howard, D. Ash and J. G. Booth, a Committee to prepare business for the Convention.

Adjourned till half past four o'clock, P. M.

Second Session.

In order, the report of the Committee on constitution being called, the following was duly presented.

TO THE MEMBERS OF KINGSTON, BOTANIC, MEDICAL REFORM CONVENTION.

Gentlemen,—Your Committee appointed to prepare a draft of a constitution, beg to report in favour of the Constitution published in the first number of the "Unfettered Canadian," suggesting the following amendments:

1st. That the name be changed, to that of the Canadian Eclectic Medical Society, as the various classes of Botanic Physicians, are now uniting their strength under this appellation; a disideratum unquestionably most desirable on many considerations; and one to which the name cannot fail to contribute much, being admirably adapted to the progressive character of true scientific medication, which binds every practitioner to seize upon safe and efficatious remedies, in all cases, whether new or old, irrespective of their having been sanctioned by Dr. Thomson, or by any other founder of a medical system; but further, the name "Eclectic," is very properly understood to denote that choice or selection, which is guided and determined by the fixed principles of science; and hence in adopting the name, we do not abandon our former hostility to the use of remedies, at war with the human constitution, but remain still, what we have ever been, the same unwavering advocates of safe, simple remedial agents in the cure of disease, in opposition to the practice of the present legalized system.

2nd. That any person of good moral character, be admitted to membership on signing the constitution, and paying annually five shillings into the treasury.

3rd. That the constitution be made to admit of the election of as many Vice-Presidents as there are Districts in Canada.

4th. Also to require the election of a Recording and Corresponding Secretary.

5th. Also to admit of granting diplomas to individuals of good moral character, on their producing satisfactory evidence of having been known seven years as Botanic *Physicians*—or on their proving themselves to have been duly licensed by any respectable Medical Association, provided they evince a hearty and willing approval of our principles, and a ready and full determination to conform to them in their practice.—Medical Students to be recognized as junior practitioners, on their satisfying the Board, that they possess the requisite knowledge of our theory and practice of medicine, with sufficient prudence and judgment, to warrant the expectation of success in their treatment of disease—requiring them to preserve in numerical order, a brief statement of their plan of procedure, in each case, for subsequent examination.

The amendments rendered necessary by the change of the name, your Committee deem it useless to innumerate, as such verbal alterations can be safely entrusted to our Secretary.

Respectfully submitted,

J. G. Booth,
J. B. Howard,
Rob't Dick,
} *Committee.*

The above report being accepted, and adopten; and the constitution duly signed by the members of the Convention, the different offices were filled as follows.

Dr. J, G. Booth, President and Librarian.
F. S. Urquhart, Esq., Recording Secretary
R. Dick, Cor. Sec. and Treas.

Vice Presidents and Directors.

Canada East—Dr. S. Gregory, Vice President Dr. R. D. Rugg, R. McConnell, Esq., J. Manning, Esq., and Capt. Flower, *Directors.*

Eastern Dist.—Rev. J. Musgrove, Vice Pres., J. Carman, Esq., Dr. A. Knowlan, Directors.

Bathurst Dist.—M. McDonald, Esq., Vice Pres., W. McGee, Esq., A. Stevenson, Esq., Directors.

Johnstown Dist.—P. Scofield, M. D., Vice Pres., A. Parish, Esq., Dr. R. Steadman, Dr. J. Howard, Dr. Howey, Directors.

Midland Dist.—Dr. E. Ash, Vice Pres., Dr. D. Ash, Dr. J. Ash, Dr. Kilburn, Dr. Sheriff, Directors.

Victoria Dist.—Wm. Smith, Vice Pres., Stephen Goldsmith, Rev. J. Gemile, Directors.

Prince Ed. Dist.—Dr. Botfield, Vice Pres., Dr. Barrenger, G. A. Sargant, Directors.

Newcastle Dist.—Dr. Clark, Vice Pres., Dr. Patterson, T. Clark, Directors.

Home Dist.—Rev. J. H. Leonard, Vice Pres. T. Lawson, Esq., T. W. Anderson, Esq., J. Cummer, Esq., Dr. Hayward, Directors.

Simcoe Dist.—Dr. J. Ford, Vice Pres., Dr. S. E. Philips, E. Gorham, Esq., Directors.

Vice Presidents and Directors, for the other Districts of Canada, will be appointed, as soon as the names of suitable persons are forwarded to the committee, directed to fill up the appointments for each District.

Professor S. H. Potter, M. D., Honorary Member.

The Provincial Society, being thus completly organized, the following resolutions were unanimously carried:—

Res. 1st. That the officers of this Society be appointed its delegates, to represent its interests and views, whenever present at any general meeting of kindred institutions, in the United States.

Res. 2nd. That the Vice Presidents and Directors of this Society, be earnestly requested to adopt measures, for the immediate appointment of Committees, of three or more, for each township, in their respective Districts, to perfect and complete our general organization; and that the Vice President in each District, be respectfully requested to convene the Directors residing in it, and in connection with them adopt the means proposed, for the appointment of the township committees, to conduct the local business of each Township; such as the signing of petitions, increasing the membership of the sosiety—extending the circulation of the Canadian, &c. &c. The Vice Pres. and Directors of any District, may at their meeting appoint their Township Committees, taking care to appoint a sufficient number to canvas the whole township in favor of our petitions, &c.

Res. 3rd. That we admire the manly, independent and efficient course of the "Unfettered Canadian," and most ardently hope, that

every member of this association, will exer himself to extend its circulation, as the best available means of elevating the standard of Medical reform; and especially *indispensable* at this crisis, as the advocate of equal privileges extended to all.

Res. 4th. That this association sympathises deeply with Dr. S. Gregory of Montreal in the inhuman persecution he has suffered, at the hands of the College of physicians and surgeons of that city; and we pledge ourselves to employ every constitutional means in our power, to procure the repeal of all laws imposing fines and penalties of any kind, upon individuals for doing good; and to assert the *known* right, and scriptural duty of every man, to alleviate physical, as well as mental suffering—also to hold up to public execration, the legislator, who attempts to render *illegal*, the performance of an *imperative christian* duty, forbidding it under severe penal enactments, and further, that we will not cease to besiege the doors of our legislative assembly, by petitions and otherwise, with the holy boldness of men, who *know* their rights, and are *religiously* determined to assert and maintain them.

Res. 5th. That Dr. S. Gregory be requested to furnish an account of the operation and effects, of the exceseively oppressive laws, recently imposed on the inhabitants of the Eastern section of this Province, at the request of the College of Physicians and Surgeons.

The hour having arrived for the lecture, as previously announced, Professor S. H. Potter M. D., of the N. Y. Central Medical College, proceeded in a very happy strain, to delineate the character of the true reformer, which he executed in a masterly manner—after which, he contrasted with great effect, the Eclectic, and the late popular system of medication; and closed with a rich variety of the most practical and deeply interesting observations; the whole being admirably adapted to the exigences of our cause in Canada.

The lecture being closed, the following resolutions were unanimously adopted.

Res. 6th. That the thanks of this meeting be tendered to Professor Potter, for his timely able, and highly appropriate address, requesting him, to furnish the editor of the Unfettered Canadian with a copy of the lecture for publication.

Res. 7th. That we hail with delight, the extraordinary success of our Brethren in the neighboring States, in liberating themselves *so speedily* from the unhalowed chains of Medical monopoly; enabling them, to have, already, in full operation, no less than *Seven* Medical Reform Colleges regulary organized, and legally chartered; nobly refuting the foul calumny, that we would degrade science, and perpetuate ignorance.

Res. 8th. That, as we cannot successfully open a Medical Reform College in Canada, till all medical monopoly is completely abolished it is highly gratifying to know, that a well organized Eclectic College, chartered by the state of N. Y. is now open for the reception of Students in the neighboring city of Syracuse; and, as the college is established upon *our own* principles, and its location easy of access, we shall deem it not only our interest, but also our *duty*, to encourage our Students to avail themselves of its superior advantages.

Res. 9th. That the New York Eclectic Medical and Surgical Journal, conducted by Professor S. H. Potter M. D. of the New York Central Medical College, merits the full confidence, and cordial support, of the friends of our cause in Canada, as a medium through which, they may be kept constantly apprised, of the rapid progress of our principles, now sweeping with irresistable force over the whole American Continent; the developements of which, cannot fail to be highly useful even to the *family* practitioner, especially as exhibited in the clear, startling, and impressive style, of the Editor of this new, and highly *valuable* acquisition to our least of Medical Journals.

These measures and resolutions, having been all separately considered and discussed in the best of feeling, and adopted with great unanimity; the deliberations were closed, by adjourning. to meet in the City of Toronto, on the second Tuesday in September, 1850, at the hour of three o'clock P. M.

ROBERT DICK, Cor. Sec.

CENTRAL MEDICAL COLLEGE SYRACUSE N. Y.

The Fall and Winter Course of Lectures in this Institution will commence on the *first Monday in November*, next, and will continue sixteen weeks. The aggregate cost of Tickets will be $55, including Demonstrator's fee.—The Graduating Class will receive the benefit of extra instructions from the Faculty, during hours not appropriated to the regular exercises of the College, as often as three times per week.

FACULTY.

J. R. Bush, M. D. Professor of Special General and Pathalogical Anatomy.

S. H. Potter, M. D., Professor of the Principles and Practice of Surgery.

S. M. Davis, M. D., Professor of Theory and Practice of Medicine and Pathology.

O. Davis, M. D., Professor of Obstetrics and Diseases of Women and Children.

B. S. Heath, M. D., Professor of Physiology and Medical Jurisprudence.

W. W. Hadley M. D., Professor of Materia Medica, Therepeutics and Pharmacy.

* C. Linck, Ph. D., Professor of Chemistry and Medical Botany.

† Wooster Beach, M. D., Emeritus Professor of Clinical Medicine.

*Dr. C. LINCK has several years past been Professor of Analytical Chemistry in Cambridge University, Mass.; and resigns his Chair in that institution, and comes to Syracuse to settle permanently as the Prof. of Chemistry and Botany in Central Medical College, and is author of a work on Chemistry and recommended in the warmest manner by Cambridge and Harvard Universities as well a Dr. Liebig of Germany, his protector. Dr. L. is furnished with all necssarp apparatus and labaratory, fully prepared to do justice to his imdortant department.

† Dr. W. Beach, of N. Y is the distinguished Author of numerous Medical Works of world-wide reputation. He has receutly travelled through eight or ten kingdoms in Europe, and visited nearly all the important Medical Institutions to collect information to promoote the cause of scientific reform. He has engaged to be here early in the session with a female anatomical model, made the order in Paris, diagrams, pathalogical nrawings, &c., executed in London, and established a Dispensary and clinic for students, where lectures will be given on the diseases of patients present, that the students may enjoy the full benefits of his extensive research.

J. R. Bush, M. D., Demonstrator of Anatomy and Surgical Prosector.

The Matriculation Ticket, $5, and the Graduation Fee, $15. Any student can have the privilege of attending Lectures in this Institution until he graduates, by the payment of $100 in advance.

Good board can be had at from $1 50 to $2 50 per week; and Students by clubbing together, can live well at an expense of from 50 to 75 cents per week.

A Student will be admitted to the Lectures gratuitously from each Senatorial District throughout the State, by paying only Matriculation, Demonstrator's and Graduation Fees. This arrangement gives to thirty-two Students annually, the sum of $50 each. Those of this class are to be Promising, Indigent young men of a good English education, and of a good moral character. Sons of Clergyman and Physicians will have the preference, if such apply in season. Such students are to be recommended by a Justice of the Peace, or a Judge of the County in which he resides.—They will please forward their applications as soon as the first of November, next.

The faculty being solicitous that all may enjoy the benefit of their labors, who wish, will take responsible notes on time, where persons are unable to advance the money. In such cases, ten dollars will be added to the cash price of each term.

All designing to attend, will please forward their names, that we may be apprised of their coming.

The following works are recommended by the Faculty:

Anatomy.—Wistar, Wilson, Quain, and Horner.

Surgery.—Druit, Liston, Cooper, Gibson and Miller.

Theory and Practice.—Watson, Stokes & Bell, Eberle, Beach, Howard, Smith, Curtis, and Thomson.

Physiology.—Carpenter, Williams, Dunglison, and Beach.

Obstetries and Disease of Women and Children.—Rigby, Beach, Curtis, and Eberle.

Chemistry.—Linck, Turner, Gray and Beck.

Botany.—Eaton, Bigelow, Gray and Wood.

Materia Medica.—Kost, Nelligan, Wood & Bache.

Pathology.—Gross, Chomel, Williston, Allison and Stille.

Auscultation and Percussion.—Laennec, Bowditch, and Watson.

Medical Jurisprudence.—Beck and Williams.

The text books recommended are consulted authoritatively, when descriptive of actual conditions, as in Anatomy, Physiology, Pathology, &c.; but otherwise Eclectically, with careful discrimination.

The fundamental peculiarity of our doctrine in the treatment of disease is, that nothing should be used as a remedy that will injure the human constitution, and that all means used, should have a direct tendency to sustain, and not depress the vital powers.

The College will be furnished with all suitable facilities for imparting a thorough and correct course of instruction on every branch of Medical Science. Dissections, Surgical Operations, Illustrations and Experiments will be conducted in the most advantageous and instructive manner. It is the design to give Students advantages here, fully equal to those enjoyed at any other Medical College.

For further information respecting the Lectures, direct a letter *post paid* to Dr. S. H. Potter, Syracuse, N. Y.; or to Dr. S. M. Davis, Buffalo; Dr. Wm. W. Hadley, Rochester; Dr. W. Beach, New York City.

NOTE.—Seventy-six Students have already given their names to attend the lectures, and among the number, Mrs. R. B. Gleason, wife of Dr. Gleason, Physician to the Glen haven Water Cure Infirmary, with a view to complete her medical education by attending two terms of lectures, and obtaining the degree of M. D. A second Miss Blackwell. Syracuse. Sept., 1849.

CAUSE OF INSANITY.

The numerous cases of insanity, or semi-insanity, occurring among literary men, has caused anxious inquiry as to the probable cause. In most cases, we believe it results from nervous prostration, brought on by the over-use of various kinds of stimulants. It is too much the habit of literary men to seek, in noxious stimulants, to excite jaded or flagged mental power. Some resort to wine and alcoholic drinks, some to opium, and some to tobacco. The use of any of these artificial helps, however buoyant for the moment, is dangerous, if not fatal in the end. Whatever tension is thus given to the nerves and brain, must, in its reaction, reduce the vital powers in ratio; so that the system is constantly undergoing an unnatural straining and relaxing, until it finally gives away. If literary men—men who use the brain more than the body—would take their stimulous in plentiful physical exercise, the steady use of cold water for bath and beverage, and abundant sleep; opium, brandy, and tobacco, would very soon be cast, with other physic, to the dogs.—*New York Sun.*

REMARKS.—The fact is as lamentable as true, that great men are very apt to fall into most egregious errors, and commit some fatal blunder in doctrine or practice. Indeed, this fact has passed into the proverb, "Great men have faults." But why is this? Because those excessive labors which raised them to distinction, also diseased their body and brain; and this disorders their feelings, opinions, and conduct. The HEALTH of distinguished men should be their FIRST concern, because it is the basis of all talent and all correct feeling and conduct; while disease vitiates and depraves the man, MENTAL as well as physical. Alike to retain and to enhance their greatness, great men and women MUST preserve their HEALTH. —*Phrenological Jour.*

"We must adopt the Thomsonian remedial agents, or lose our practice. I have used Steam, Cayenne, and Lobelia, and found them to be useful remedies to remove disease."

PROF. M'CLELLAND.

"The poor are the best patients. God is their paymaster." DR. BOERHAAVE.

A man laboring under acute pain from colic being asked why he did not apply for medical aid, replied, that "he did not consider himself *quite ready to die.*"—*Thompsonian.*