Acupuncture as a remedy for Rheumatism. By Wm. Markley Lee, M. D. of Indian Town, S. C.

Few diseases are reported to be cured by a greater variety of remedies than Rheumatism, and few are subject to greater disappointment in the attainment of the expected results. This arises principally from the circumstance, that Rheumatism is of a two-fold character, entonic and atonic, requiring the closest discrimination in treatment, as the remedies proper for each form are diametrically opposite in their action.

The detail of all the remedies for Rheumatism would occupy much space, and convey little new information. My present object will be, to give my experience in the use of one remedy, in my opinion not sufficiently appreciated. It was about six years since, after reading the practice of Churchill, Cloquet, and others, I was induced to try this remedy on my patients, in cases apparently suited to it, and, for the sake of brevity, will give a sketch of a few of these cases.

Case I. I saw an old negro woman, the gardener of one of my friends, limping at her work, who, on enquiry, stated that she had Rheumatism of the knee. I had not at that time tried acupuncture, but feeling disposed to make the experiment, told her in a jocular manner, that I could cure her with a needle; to this she was extremely averse, fearing the pain, but after
some persuasion consented. Having fitted the larger end of two slender needles into small phial corks, I kept the skin of the inner surface of the knee tense with the thumb and forefinger of the left hand, and introduced them to a moderate depth with a slow, alternate, semi-rotary motion. As their points entered the skin, she complained of slight pain, which being pierced, she scarcely felt them: after about ten minutes, I directed her to bend the knee slowly; to her surprise, flexion no longer caused pain, as it did previous to their introduction. The needles were then withdrawn with the same motion as inserted; not a drop of blood was lost; even the places of insertion could not be seen, and what was infinitely more important, the pain had vanished. A few minutes after, she complained of it at the inner side of the ankle, whence, after about the same lapse of time, it was routed as from the knee. The old woman was so delighted that she danced for joy. For several days, she continued free from her old complaint, but after being again exposed to the exciting cause, damp weather, it was renewed. The experiment was not repeated.

Case. II. A lady was subject to Rheumatic stiffness of the neck, after exposure to a damp atmosphere, particularly at night. On one occasion I found her with her head so fixed, that rotation was impossible. After some persuasion, she consented to the introduction of the needles; of which two were inserted, one on each side of the vertebrae. As their points touched the posterior fasciculi of cervical nerves, she complained of an acute tingling sensation, like an electric shock, which induced me to retract the needles slightly. After about fifteen minutes, I requested her to make an effort to turn her head, which to her surprise she did, with no pain except that which arose from the pressure of the muscular fibres upon the points of the needles. The relief was prompt and permanent.

Case III. I had the misfortune some years since to luxate my left clavicle, in consequence of which I have been occasionally subject to rheumatism of the deltoid muscle on getting wet. I have in repeated attacks, laid bare the shoulder, and requesting some friend to keep the skin tense, introduced three needles around the shoulder. Previous to their introduction, I could not raise the arm to a horizontal direction, unless aided by the other hand, and suffering severely. The pain caused by the needle
inserted into the anterior fibres of the muscle, was decidedly the most acute, evidently arising from the contiguity of the nerves which supply the arms. In fifteen minutes I was free from pain, and could move the arm with perfect ease, upon which the needles were withdrawn. Months elapsed before I experienced any return of the Rheumatism.

Case IV. An old seaman laboured under entonic Rheumatism of the deltoid muscle; the shoulder was sensibly hot, but being a topical disease, at the request of the physician of the Marine Hospital, of which he was a patient, I consented to try acupuncture; he, like myself, could not elevate the humerus to a horizontal direction. The needles were introduced, and suffered to remain two hours; extraction was found extremely painful and difficult; the corks were detached, and it was necessary to thread the needles in order to extract them. Before insertion they were highly polished; after extraction they were blackened and deeply corroded* completely around the portion at the surface of the skin; the imbedded portion, irregularly. It is well known that the nerves are expanded as a delicate net-work over the entire surface of the skin; it is also supposed that the nervous and galvanic fluids are identically the same. May not the greater abundance of this galvanic or nervous fluid at the surface, account for this more complete corrosion of that part of the needle? The pain was by no means removed; indeed he suffered so much from the extraction, that no persuasion could induce him to submit to any variation of the experiment. He was subsequently cured by other means.

Case V. A young man applied to me, to try the effect of acupuncture upon a chronic pain of the loins, which had been treated unsuccessfully by some of the most eminent physicians of Charleston; cupping, blistering, rubefacients having all been tried with only temporary benefit. On the insertion of the second needle, if I mistake not, he fell back into my arms in a state of syncope. Having laid him on one side, I extracted the needles. He stated, after reviving, that it was not pain, but a

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* I recollect to have read in a French Medical Journal, to which I have not access at present, that the same effect (corrosion) was produced upon a needle inserted in a portion of flesh newly prepared for the table. Altho' rather incredulous, I repeated the experiment, and found the statement literally correct; the needle was furrowed, blackened, and excavated.
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sudden sickness, which caused him to faint. This uncommon symptom would have caused me some alarm, had I not previously met with such a case in a French journal. I never could persuade him to repeat the experiment, although the lumbar pain was relieved for a few days.

These are a select few of many cases of Rheumatism which I have treated by acupuncture;—they have led me to anticipate the following results, viz.

In acute Rheumatism, the needle acts as an irritant, and is therefore improper before inflammatory action has been reduced. The effect produced in case 4th, will be a lesson to me in future never to suffer the ordinary steel needles to remain for any length of time. Under those circumstances they should be made of gold or platina.

In sub-acute Rheumatism, I consider acupuncture a prompt and efficacious remedy. I frequently employ it, much to the surprise of my patients, from the trifling pain which it causes, and the promptness of relief; and equally to the astonishment of the attendants, who rarely have faith in the remedy, until proved by positive demonstration.

In chronic Rheumatism, acupuncture will relieve promptly and thoroughly, but the disease is liable to recur on the re-application of the cause usually producing it.

It may be inferred from what has been stated, that I believe acupuncture to owe its efficacy to the transmission of the galvanic fluid. Such has long been my opinion, although I had no opportunity to ascertain the fact by the use of the battery. This point has been recently established by the experiments of Dr. Stokes, of the Meath Hospital, as re-published from the London Medical and Surgical Journal into the American Journal, No. XXXIII, p. 225, et sequent. As this periodical is in general circulation, the reader will find the article referred to.

I consider acupuncture entitled to far more attention than it has yet received in the United States. It is not painful. I have never introduced the needle without the patient expressing the greatest surprise at the trifling degree of pain; indeed some have declared that if asleep it would not awake them. Of this I have some doubts. It is not inconvenient. Every house can furnish needles. It is prompt and effectual. I have never failed to produce the desired effect, in appropriate cases, within the
space of a quarter of an hour; and in such cases, the relief was permanent. I therefore repeat it as my opinion, that physicians have not duly appreciated its therapeutical efficacy.

ARTICLE II.


MAY.

Greatest heat at 12 o'clock, 87°
Least heat at do. 63
Mean heat of the first half of the month, 64.25
Mean heat of the last half of the month, 74.62
Mean heat of the whole month, 63.99
Rain Guage, 2 inches, 6 1-2 lines.
Cloudy days, 6
Thunder showers, 17

JUNE.

Greatest heat at 12 o'clock, 96°
Least heat at 12 o'clock, 58
Mean heat of the first half of the month, 71.22
Mean heat of the last half of the month, 75.09
Mean heat of the whole month, 71.61
Rain Guage, 7 inches, 7 lines.
Rainy Days, 9
Thunder showers, 16
Prevailing winds, S. E. and SW.

June 20. First general appearance of blossoms on cotton on many plantations in Burke county. Though in small patches, in situations exposed to the sun, some blossoms were observed as early as the 12th of the month. In all these latter situations, the soil, by analysis, was found to contain from twenty to thirty per cent. of lime, and much animal and vegetable decomposed substance.

Note. The diurnal mean heat is obtained from a number of observations made during the day; the monthly and semi-monthly is deduced from the diurnal means.
ARTICLE III.

On the 9th of March, 1834, at 11 o'clock, A. M. a servant boy belonging to Mr. Carswell, of Burke county, was found in the stable, in a profound stupor, and apparently insensible to all impressions. I visited him at 9 o'clock, P. M. of the same day, still labouring under the same symptoms, with very slow respiration and pulse, a considerable swelling over the left ear, with a wound in the integuments, about the size of a buckshot hole, from which some blood, and a small quantity of cerebral matter had been discharged, evincing subjacent fracture of the bone, and breaking up of the cerebral mass.

The patient remained in this situation until the forenoon of the 10th, when Dr. M. Antony met me in consultation on the case. We soon proceeded to a farther investigation of the internal condition of the wound by the knife; whereon, when we raised the flaps, which were made by an incision through the integuments, commencing between the zygomatic process and the auditory foramen, and extending up on the parietal bone; and one transversely above the ear; the fracture of the cranium was fully brought to view. It extended from the posterior inferior angle of the parietal, passing just over the zygomatic process to the temporal portion of the sphenoid bone. This part of the fracture was of a curved shape, with its convexity downward. An inch and a half above, there was a similar fracture, though less curved, chiefly in the external plate of the parietal, corresponding in direction with the first, with which it united anteriorly and posteriorly. The depressed part consisted of many fragments of different sizes, most of which remained attached to each other, and to the upper part of the fracture by the inner table, which, instead of breaking, had bent under the violent force which caused the fracture, (which we believed to be the kick of a horse,) the separation being complete only throughout the whole extent of the lower side of the fracture.
After removing some loose spicule, we attempted to elevate the depressed fragments to a level with the general surface; but in consequence of their having been driven beneath the firm bone at the lower side of the fracture, we could not succeed, notwithstanding a considerable lever power was used. We then resorted to the use of the saw, by which, division of the inner table was completed through the whole extent of the upper, anterior, and posterior limits of the fracture.

The fragments were then easily raised, immediately on accomplishing which, the patient uttered a loud shriek, and there gushed from the wound about two large table spoonfuls of cerebral matter, slightly and irregularly coloured with blood; so as to represent a thick, bloody, purulent discharge from a suppurating depot. It seemed to be that portion of the brain which had been broken up by the violence which had driven the whole of the depressed parts deeply into that organ, as they moved with a hinge-like attachment to the upper edge of the fracture: and from which depression the resistance within had forced them back to lodge against the inner table below. The Dura Mater was lacerated through nearly the whole antero-posterior length of the fracture, on a level with the lower part; from about the middle of which, so soon as the pressure of the fragment beneath was removed, a brisk arterial hemorrhage came on, which, however, soon ceased spontaneously. The wound being cleansed of all loose spicula, saw-dust, &c. the integuments were laid on the wound and secured by adhesive straps, suitable compress, bandage, &c. leaving sufficient vents for discharge. During the progress of the operation, considerable reaction came on, and the sensibilities returned to a considerable extent. On the morning of the 11th, his sensibilities were very well restored; but the power of speech had not been fully recovered. His pronunciation was not very distinct; but he endeavoured to use some words—mostly verbs; but never seemed to attempt the pronunciation of any noun. It appeared, indeed, that he had no memory of the name of anything whatever. He continued to do well until the 14th, when some spasms of the same side of his face and jaw appeared, and lasted about twenty minutes. In the evening they re-appeared, and were finally dissipated by an anodyne. On the morning of the 15th, a yellow serous discharge issued from the wound;
Ca$ of extensive fracture of the Cranium.  [Aug.

the collection of which had probably caused the spasms of the previous day. This discharge continued for several days, during which he gradually recovered his speech; and with the suitable use of means for preserving a due solubility of bowels, he was well at the end of six weeks.

The January following, the boy was attacked with symptoms of Phrenitis, which readily yielded to the early application of the lancet, and of cold water to the head.

It may be well to state in this place, that at the time he laboured under Phrenitis, Pneumonia was so prevalent that twelve other members of this family were suffering from it.

This boy had received, several years previous, an injury of his head by a fall from a horse, which rendered him liable to suffer much from exposure to great heat of the sun—from which, indeed, he was, at one time, so much afflicted that a serious and protracted course of treatment was necessary for his restoration from considerable derangement of intellect. In general, however, these turns were characterized by headache, red eyes, &c. of which he was usually relieved by a purgative, with abstinence.

Since his recovery from the fracture of the cranium, he is no more liable to danger from exposure to the sun; but sustains as much exposure as other persons without the least inconvenience.

Note. This fracture was remarkable for the extent of injury. There were ten fragments of bone removed, three of which were about an inch and a half long, and one-half to three-fourths of an inch wide; the others of different smaller sizes. But the chief importance of the case is the extent of injury of the membranes, the extent of violence done to the cerebral mass, and the large quantity lost, from which there was recovery. It is also remarkable that the old morbid condition from a former wound was cured by this. There is another observation, however, on this case, which I think of more practical importance. On contemplating the seat and extent of this injury, it will be seen that the cerebral substance of the middle lobe was broken up and compressed into almost the whole range of the great inferior horn of the lateral ventricle. There was consequently an undue pressure on all the parts of the cerebral mass bounding
this part of this cavity; through the whole extent of which is the relief known by the name of Cornu Ammonis. This pressure continued with very considerable force until the bone was liberated; as evinced by the sudden gush of broken cerebral matter immediately on relieving the pressure. At this time, too, it will be remembered that his sensibilities became very considerably improved, and he soon recovered the memory of many words. The serous effusion into the wound continued a considerable pressure on these parts until it escaped freely, several days after the dressing. During the whole of this time, the loss of the memory of nouns continued—things themselves were remembered, their qualities, &c. understood; but the name in no instance during my observation of the patient; and as I understood, at no other time, until after the serous discharge from the wound, above alluded to, when the power of using nouns returned. Even personal pronouns were remembered. We will illustrate his speech by an example. On desiring coffee, he said “Give me some —— give me some ——.” On being asked what? he said “some ——,” putting his finger to his open mouth. Some water? “No.” Some tea? “No, some ——.” Some coffee? “Yes.”

Some three or four weeks after witnessing this case, I visited a lady in a neighbouring village, who was labouring under precisely similar derangement of the power of speech. On my arrival, she soon desired some water. Her expression was “give me some ——.” Water? “Yes.” On finding that her husband had left the room, she enquired, “where is my ——,” repeatedly, until her husband returned. I was informed that on desiring that I should be called to her, she said, “send for —— away yonder,” pointing towards Augusta. On naming several physicians to her, she said “no,” until my name was called, when she replied, “yes.” The messenger had not been long despatched before she manifested a want of recognition of time, in relation to the distance to be travelled, a distance of about fifty miles, by asking, “Is —— coming?” “Has —— come?” On being asked what or who she meant, she would reply, “Has —— come from —— away yonder?” pointing towards Augusta, &c. &c.

The lady had a few weeks before taken cold, on the third day of her childbed confinement, the effects of which appeared to
have been considered as milk fever. The febrile symptoms, however, continued; with intense and increasing pain, near the lower part of the middle lobe of the cerebrum. Various prescriptions had been used with little or no good effect. The febrile action had gradually moderated, the skin continuing dry—secretions generally torpid, with pale hydropic expression, &c. Remembering the late demonstration of pressure in the same part of the cerebrum, in the above case, which was called to my recollection by the precise similarity of nomenal dementia or hebetude, I was induced to offer the opinion to the consultation, that there was undue pressure on the same parts of the cerebral organ. The history of the whole progress of the local inflammatory action which had been manifested, about the location of that part of the choroid plexus which extends down into the inferior horn of the lateral ventricle; the present aspect of continuance, the remaining febricula, and the evidence of pressure within this part of the ventricle, induced me to offer the farther pathological view that the inflammatory action was terminating by an hydropic effusion into this cavity, which exerted the pressure.

A therapeutic course in strict relation with these pathological views, was adopted, on which the patient recovered in a reasonable length of time for a case so chronic in its nature.

The sensation of pain in this case had pointed out very precisely the location of that part of the ventricle above alluded to, and the whole of that part of the choroid plexus which extends into the inferior and the posterior cornu of the lateral ventricle.

These observations may be useful in Phrenological enquiries.

M. ANTONY.
An essay in answer to the question "are there any idiopathic fevers?"—read before the Medical Society of Augusta. By Edward A. Eve, M. D. of Richmond county, Geo.

Before entering on a subject, the discussion of which has for a considerable time, more warmly than any other, occupied the medical world, and which still remains "sub judice;" it may be well to come to a precise understanding of the terms used. The strictly lexicographical definition of the word Idiopathic, would be a peculiar affection, from ὑπό (peculiar) and τὰς (an affection). In a more medical sense, it would denote a disease independent of any other disease; it seems, however, to be used more particularly by medical writers, with reference to the antagonal position it bears to the term symptomatic. It is considered that in this relation, the power of the term seems most obvious. With these views, from the amount of evidence that presents itself to my mind, I am compelled to believe that there are fevers which may be properly entitled idiopathic. Although, in a certain limited sense, fever may depend upon local irritation, still I would not recognize by this the doctrine that all fevers radiate from a local point of irritation, much less that the "cohors febrium magna," (all the infinite diversity of fevers,) depend on a pre-established gastro-enteric inflammation. While we willingly accord to Broussais the honor of being one of the greatest pathological writers of the present age, still we regret to see, that, that saliency of genius, which, like "vaulting ambition overlaps itself," has led him far, very far into ultraism, the besetting sin of the day; and while we acknowledge that he has unmasked many hitherto occult gastro-enterites, and by a more enlightened pathology, conducted to a better and more judicious treatment, thereby conferring a lasting obligation on our science, still we must urge against that doctrine, the charge of too great exclusiveness, which attributes all fevers to a pre-established inflammation of the stomach and intestines. I am aware that in supporting the side of the question, which the preponderance of evidence compels me to advocate, I shall
oppose the opinions of some members of this society, whose medical attainments I hold in very high estimation.

The advocates of the Broussaian doctrine refer to post-mortem examinations, and believe the truth of their doctrine established by the phenomena developed by the dissecting knife. It is affirmed that traces of inflammation in a more or less advanced state, occur almost universally in the mucous membrane of the alimentary canal of such patients as die of febrile affection. Admitting that these marks of previous inflammation do very generally occur, it is reasonable to suppose, that in a very great many cases, inflammation of this part, instead of being the original source of the disease, supervened after the development of febrile action: that parts unaffected in the commencement of fever, do in its progress become highly affected with inflammation, is a fact of familiar observation, and when we bear in mind, that the secretions poured into the intestinal canal are vitiated, and sometimes of a very acrid quality; and moreover, that from the almost entire proscription of purgatives so strangely insisted on in the Broussaian practice, they are allowed to remain an unmerciful length of time in contact with the delicate mucous membrane of the intestines; is it strange that traces of inflammation, or even of ulceration should appear? As a still farther offset against evidences drawn from autopsic appearances, it is ascertained that so far as a mere redress, or an injected state of the capillaries of the mucous membrane is concerned, no satisfactory evidence can be adduced of the previous inflammation of this structure; for these phenomena often occur in articulo mortis or post mortem; as has been demonstrated by the observations of Yellowly and Seeds, founded on experiments. The former of these writers observes, that from seeing these appearances of the stomach so generally exist, in persons suddenly destroyed, while apparently in perfect health, in whom he found the mucous membrane of the stomach highly injected, he is induced to imagine that the opinion so usually entertained of their being the result of inflammation is not well founded. Drs. Seeds and Parish found that in animals bled to death, the membranous structures frequently exhibited a state of injection, which might readily be mistaken for inflammation; this may also be accounted for by a power the arterial tubes have of contracting to a considerable extent, by what Bichat calls the contracti-
lity of texture, and that this power is not limited to the period of life, but continues for some time after death. It is equally a physiological fact, that the capillaries are endowed during life, with a peculiar kind of sensibility, which causes them to resist the intromission of such fluids, as they are not, in the performance of their natural functions, designed to convey. This peculiar sensibility, by virtue of which, the serous capillaries refuse, or contract against the intromission of red blood, it is thought, depends on the regular influx of the nervous influence. These facts are abundantly proven by experiments made on animals. The following is one of M. Bunira’s, quoted by M. Bichat:—

He fixed the pipe of a syringe into an artery of a living animal, and on endeavouring to force the fluid into the vessel, he found great resistance, the piston passing very slowly, and only with the application of much force. On causing the animal to be killed, by dividing the spinal marrow just below the occiput, the fluid passed rapidly out of the syringe into the artery, although very little force was applied. The application of the result of this experiment to the post-mortem production of a red and injected state of the membranous structures, is easily explained. So long as the serous capillaries retain their vitality, they resist the entrance of red blood; as soon as their vital properties cease, they lose the power of resisting the intromission of red blood, becoming in fact mere yielding and passive tubes: and as the arteries continue to contract on their contents for some hours after the extinction of life, they necessarily force the red blood forward into the now relaxed and unresisting capillary system, and thus is produced the red and injected state of the more vascular structures so often found on post-mortem examination, where no previous inflammation whatever existed. Sir W. Philip found that the lungs and stomach were covered with injected vessels in animals, which died from the division of the par vagum. Yelllowly found that persons who died from hanging, exhibited the mucous membrane of the stomach in a high state of apparent inflammation. And the able Professor of Anatomy in this College, while conducting the post-mortem examination of the last criminal executed in this county, exhibited to the admiration of all present, a most beautiful specimen of injected stomach. This individual it was well known died of hanging, and not of fever. If then this state of the stomach can, and does exist without fe-
ver being its attendant, and if post-mortem examinations of fever patients show equal traces of inflammation in other organs of the body, as the brain, and thoracic viscera, it must in a great measure abate the value of the evidence afforded by the dissecting knife in favor of gastro enteritis being universally the first link in the catenation of febrifugous causes. Another evidence of the unsettled state of this doctrine may be predicated on the fact that the advocates of fever radiating from a focal point of irritation, locate that point in different organs. While Broussais pronounces gastro-enteric inflammation to be the "fons et origo" of fever, the distinguished Clutterbuck, with equal confidence asserts that all fevers emanate from a pre-established inflammation of the brain and its membranes; and each appeals to post-mortem examinations for the the truth of his position.

A consideration of a few of the phenomena of fever will perhaps reflect some light, by which we may distinguish idiopathic fever from the febrile action consequent on inflammation. Without regarding the initial symptoms which usher in almost all purely febrile affections, and which are very different from those characteristic of inflammation, the whole course and phenomena of intermittent fevers present insurmountable objections to their identity with that febrile action consequent on a pre-established focus of irritation in the gastro-enteric membrane. The course of treatment found most successful in the two diseases, will at once preclude the possibility of their identity; while quinine, arsenic and piperine are the most successful remedies in arresting intermitting fevers, who would not turn away with horror at the idea of pouring such phlogistic articles into the stomach of a patient labouring under gastro enteritis, and in their stead prefer leeches and the diete absolu.

If we dislodge the origin of fever from the location assigned to it by Broussais and his disciples, it will be incumbent upon us to give it a habitation elsewhere; we would therefore define fever to consist essentially in a nervous derangement of the arterial system, caused by the impression of a specific poison, designated malaria, arising from the decomposition of organic matter.—This derangement of the nervous, is imparted to the vascular system; hence we have the first and second link in the formation of a fever. A consideration of the manner in which the
febrile poison is communicated to the system, will, perhaps, in some measure countervail the opinion that it is altogether of gastro enteric origin, and tend to corroborate the positions advocated in the preceding remarks. It is well known that fever depends upon a malarial constitution of the atmosphere. Those who contend for the gastric origin of fever, suppose that the febrifuge poison becomes entangled in the saliva, and is thus applied to the surface of the stomach. The quantity received in this way, would scarcely seem sufficient for the effect produced. The very delicate and extended surface of the air-cells of the lungs, exposed to an impregnated atmosphere, would, it seems, present a much more adequate medium of communication. And when we reflect on the very extraordinary effect produced by the inhalation of the nitrous oxyde gas, as witnessed in the philosophic experiments of last Wednesday evening, we may well infer that opposite and deleterious consequences may be produced more or less suddenly, by the continued breathing of a malarial atmosphere. Neither the nitrous oxyde gas, nor the sulphuric ether, will produce their peculiar exhilarating effects when taken into the stomach.

Thus I have given in a rambling and desultory manner, as they have been suggested to my mind, a few of the evidences in favor of the existence of idiopathic fevers. The arguments on the other side of the question are many and specious, and well worthy of serious consideration; but as we hope to hear them fully and ably advanced and advocated in the course of the evening, it will be unnecessary to offer them in this place.

Before dismissing the subject finally, we will endeavor to define in what fever really consists, and after this, institute a comparison between it and inflammation; by doing which, it seems to me, we may very clearly and satisfactorily disprove their identity. In defining the true nature of fever, we must consider what organs are affected, in what manner they are affected, and in what order the derangements of these organs succeed each other, "In fever there must be derangement of the nervous and sensorial functions; derangement in the circulating function, and derangement in the secretory and excretory functions. This is the circle of morbid actions." Thus says Southwood Smith, to whom I am indebted for this definition of fever; and the substance of whose lucid diagnosis between inflammation and
fever, I will proceed to give in a very condensed form, interlarded with such observations as will make it apply in the present discussion. There never was a fever in which all these organs and functions were not more or less in a morbid state; there never was a concurrence of this morbid state in this complete circle of organs without fever. It is not the invariable occurrence of a particular number of events that is alone sufficient to constitute fever; to this must be added invariableness of concurrence in a particular order. Derangement in the function of secretion and excretion, never comes first in this series; derangement in the nervous and sensorial functions never comes last in the series; derangement in the functions of the circulation never comes either first or last in the series, but always second in succession. Thus fever consists in three successive morbid changes, occurring in the following order:—In the first place, derangement in the nervous and sensorial functions; in the second, derangement in the circulating function; and thirdly, derangement in the secretory and excretory functions. With the acknowledgment of these facts, we may dispense with symptomatology, as symptoms are only the external and visible signs of internal and invisible conditions of the organs. Thus having the true characteristics of fever, if no other disease presents the same character, fever must be a disease sui generis. In inflammation, some of the phenomena are the same; but the order in which they occur is different, and thus affords a clear and applicable mark of distinction between fever and inflammation. In inflammation there is a similar derangement in the secreting and the excreting functions. There is also sometimes similar derangement in the circulating function, but the derangement in the nervous and sensorial functions is seldom, if ever, similar. The derangement in these latter functions, while it is apparently different in kind, is certainly and invariably different in the order of its occurrence. In Pneumonia, Enteritis, and Hepatitis, the nervous system is the last to be involved, and suffers the least. While we acknowledge that it is of the utmost importance in a practical point of view, to bear in mind the close connection between inflammation and fever, we at the same time see clearly that they are not identical. As the term fever is meant to designate a certain number of events, which occur in a certain series; the term inflammation on the other hand, expresses ano-
ther series of events; each event composing this train, succeeding each other in a different order." We have now compared inflammation and fever with regard to the series of events and the order in which they occur in each, and find that they differ; and as different terms are used to express different things, we conceive that the term idiopathic is a very proper word to designate such fevers, as we see do not owe their existence to a pre-established inflammation in some particular organ. Although the state of the system in the primary attack of fever is not identical with inflammation, it is acknowledged that the morbid condition into which the system is brought, in the progress of fever, is for the most part that of inflammation: still, even in a practical regard, though the remedies are the same in febrile as in ordinary inflammation, they must be modified in the same proportion that the febrile inflammation is modified by the peculiar pre-disposing and exciting causes. Venesection is equally necessary in each; but the abstraction of sixteen ounces of blood in febrile, will effect as much as double the quantity in ordinary inflammation. Thus, though not for a moment denying the abundant existence of symptomatic fevers, we insist, that, whether we observe the causes, the phenomena, or even the treatment of fevers, we are compelled to recognize also a class which are properly termed idiopathic fevers.

ARTICLE V.

A case of misplaced action of Ergot. By Isaac Bowen, M. D. of Augusta, Geo.

On the 17th of May, 1823, I was called to see a negro woman, who had been in labour for more than twelve hours. On examination per vaginam, the os tineæ was widely dilated, and the vertex of the child's head nearly even with the Labia. The presentation was strictly the first of Baudelocque. I arrived precisely at 4 o'clock, P. M. at which time I was
informed by a midwife then in attendance, that labour was going on very favourably until 12 o'clock, M. when the woman was taken with a cramp in the right hip, and labour pains ceased altogether. It will be perceived that she lay in this situation during four hours, only complaining with a pain in the hip.

The case appeared to me one of the fairest for the administration of Ergot. Accordingly, I made an infusion of twenty-five grains of this article, and gave it every fifteen minutes in broken doses. It was all given in about one hour and a quarter, producing no other effect than apparently to increase the pain in the hip, which became so excruciating as to require some device for a speedy relief. I ordered a brick to be heated, which was quickly done, wrapped in a woollen cloth, and placed to the painful part. Almost immediately after this application was made, the pain of the hip was relieved, and labour then recommenced with unusual rapidity, and was terminated in a few minutes by the expulsion of a living child. I have seen Ergot produce Asphyxia, in several instances, in which the pains were not so violent. From all the circumstances of the case, it was manifest to me that the action of Ergot was invited by the pain in the hip to assist in its increase. The same Ergot has been given since, in a great many cases, and has never failed to produce labour pains in less than twenty-five minutes. In all other cases, in which I have seen it given where labour was partially suspended by erratic pains, it seemed to rectify the process by a direct action upon the uterus.

Note. The facts of the above case of labour, our favourable acquaintance with the author will not allow us for a moment to doubt. But under the guidance of our rule for philosophising, we feel bound to a different view of the sequence of phenomena, and conclude that the rationale is, 1st. That as regular labour existed; and 2d, a cramp or other severe painful affection seized the hip; that 3d, this cramp overruled the actions of regular labour; and 4th, that when this overruling cause or influence was removed, the regular actions of labour were resumed, &c.

The two first points are admitted. They are declared in the text. The third is supported by the fact of the proportion or adequateness of the cause to the effect, as is proved by constant
demonstration of this proportional power. Who has not often witnessed the overruling of labour by spasms in the Lumbrici pedes, or the Gastrocnemian, or other muscles of the lower or upper extremities, or other parts? Indeed much less powers, or those which appear less, are very common retarding influences; as bashfulness on the approach of the accoucheur, desire to evacuate, &c. One of the most provoking causes of retardation with which the accoucheur meets, (provoking because generally avoidable,) is the disposition of the patient to talk, or to change her position by voluntary effort at the approach of regular pain; either of these being quite competent in most cases to the serious interruption of the progress.

But there is another view of the proportion of cause to effect to be taken in this case, calculated to render doubtful the philosophy advanced.

1st. The quantity of Ergot given was very small, such as often fails to exercise a controlling influence on the case, especially when of such impaired power as that ordinarily procured of the druggists in the South for the last twelve or fifteen years.

2d. It is the common tendency of Ergot to operate contrariwise to this alleged operation—give point to the pains by promoting uterine action, and thus overrule what has been called misplaced labour.

3d. Supposing the Ergot to have been better than usual, and the quantity well adapted to the susceptibilities of the system; still the time, so far as we can form an opinion of it from the text, was not more than what was about necessary to develope the effect of Ergot given thus moderately by the time the expulsive efforts became efficient, which was immediately after the warm application to the hip, the pain in which, from its intensity, having demanded "a speedy device for relief."

The unusual rapidity of the labor, which "in a few minutes" terminated in the expulsion of the child, was very like Ergot operation; and if the article produced any effect itself whatever in the case, it appears to us most probable that it was in this part of the labour only.
ARTICLE VI.

On Amygdalus Persica—Extract of Belladonna. By M. Antony, M. D. Professor of Obstetrics, &c. in the Medical College of Georgia.

Amygdalus Persica, (Lin.) Fol. Common Peach Tree.—I am not conscious of any difference in the medicinal powers of the numerous varieties of this species of Amygdalus, but have for many years used for their sedative powers the leaves of any of those varieties which we cultivate for their fruit.

During the summer of 1831, after the prevalence of East winds for some weeks, a fever of unusual severity appeared here. These fevers were of remittent type, and rendered peculiarly fatal by their being generally attended with gastric irritation; and indeed in very many cases, a high degree of gastritis and gastro-enteritis, with all their usual distresses and dangers prevailed. No symptom was so uniform, especially during the first half or two-thirds of the fever season, as a total inability to retain in the stomach the lightest article of diet, or most simple drink, with more or less tenderness of the epigastrium, on pressure. These distresses attended early with a sallow pallor, shrinking of features, and sometimes a pale leaden hue of skin, and general prostration.

This state of the stomach at once, and as long as it continued, precluded all possibility of internal administrations, adapted to the treatment of bilious cases. Effervescent draughts—even a spoonful of cold water was often rejected. Sinapisms and Epispastics were used in vain. The state of stomach reminded me of some of those cases of plague in which this condition of stomach is a regular and troublesome symptom, and in which Laurel water has been found the chief corrective. Our Apothecaries could not furnish that article. Believing its virtues consisted mainly in the Prussic Acid which it contained, I determined to substitute it by some other article from which I could obtain the same power in a safe form, for ordinary use. For this purpose the Prunus Padus (wild Cherry) and Amygdalus Persica (common Peach) were presented to my mind. The latter being always at hand in every garden, I determined
on making my first experiment with it. The time for the petals had past. I filled a small vessel with the fresh leaves from the tree, loosely thrown in, then filled the vessel with boiling water and covered it closely. Of this infusion I gave 3 ss. every 15, 30, or 60 minutes, according to the greater or less violence of the symptoms. I rarely, if ever, used the 4th dose before the distressing symptom was sufficiently removed to need no more. That acute—most distressing, distracting thirst, which called incessantly for drink, and was in many of those cases perfectly insatiable, was generally allayed with equal ease; and although the taste of the infusion was most bitter and disgusting to the natural sense, in these cases it was scarcely ever rejected; but on the contrary, called for most anxiously after the first taste of it; even by children, to whom bitter drugs are generally so offensive.

I frequently applied to the epigastrium also with good effect, the leaves taken warm out of the infusion; but the infusion was generally found far more successful. The gastric symptoms in this fever were not so commonly met with towards the close of the season; but the distressing thirst was common to the end. The efficiency of the remedy was almost hourly tested until the close of the season, and my confidence in its uniformity of effect thereby continually confirmed.

One or two cases of ordinary Cholera Morbus came under my notice in the latter part of the season, in which it was equally prompt in relieving the vomiting. Several sporadic cases of Cholera Infantum occurred after the close of the fever season, in which it was used with no less conspicuous benefit. Since the above experience, I have often used this infusion with the most marked benefit in that irritable stomach which often attends Cholera Infantum, as well as gastric and gastro-enteritic fevers.

In addition to the above, I am happy in being able to state, on the authority and observation of my colleague, Dr. Dugas, Professor of Anatomy, that it has proved a convenient, prompt, safe and uniform remedy in Pertussis. His prescription is to give the patient one pint of a pretty strong infusion each day, in divided doses, until the disease disappears; and that, in families having 12 or 20 cases, he very rarely has occasion to make another prescription—the disease generally disappearing within four or five days.
The power of Prussic Acid in actually curing this disease, immediately on arriving at the full dose for the patient, was abundantly demonstrated in my practice in 1822. But the difficulties attending the use of Off. Prussic Acid are such, owing to the various strength, age, &c., that it cannot ever become a remedy in general practice, except near a competent and correct Chemist.

But we here have great cause of gratitude to an ever bountiful Providence, for strewing around us a simple, safe and cheap remedy, accessible to all.

I need say nothing of the efficacy of this medicine in the cure of those cases of Hæmaturia which depend on irritations in the urinary passages, as it has been long known to the profession.

Extract of Belladonna.—This article has been recently brought before the medical public by several northern practitioners, as a new discovery for securing an early and easy dilatation of the os uteri in certain cases; and practitioners have been requested to test its efficacy by experience. We also find since the publication of Velpeau's Midwifery, that it has been used for this purpose for a length of time in France.

I notice this article on the present occasion, not for the purpose of claiming priority of discovery, or use of the article, but simply for the purpose of bearing testimony to its virtues.

Some cases of rigid, iron-like hardness of the os uteri had, in my early practice, greatly perplexed and called loudly on me for some means for its relaxation. At length, about 18 years ago, when labouring under such a perplexity, I reflected on the power of Belladonna in dilating the pupil of the eye for cataract operations, and determined on the propriety of resorting to it for my present necessity. Considering it an article of much power, my next difficulty was to determine on the manner of its application. On searching for some preparation which might answer the demand, I finally adopted that of Chaussier's ointment, which I prepared and applied to the os uteri by means of a vaginal syringe, truncated near the round end. I filled the end to the extent of about 1 inch with ointment, and after introducing it to contact with the os uteri, whilst my patient was laying on her back, forced the ointment out of the syringe into the most depending part of the vagina, where the os uteri rested. The syringe was then withdrawn, and the ointment
more particularly applied with the fingers to the whole of the os uteri. After two hours the opposing rigidity was found to be yielding, and the case progressed without farther difficulty. Several cases have since occurred in which I have used it with similar success. In only one, was the second application needed. I have no fears in its free application in that way, after the liberal use made of it in those cases in which I have witnessed its safety and efficacy.

It will not be forgotten that its use to the eye for dilating the pupil in cases of cataract is almost universal, and although this organ is one of proverbial delicacy, still we have heard no complaint of its injurious effects; and I have myself often used it in these cases to my very great convenience, notwithstanding the great susceptibility of the part and the concentrated form in which the solution of it was applied. I would, however, from the fact of the unusual inflammation which attended my two last cataract operations, in which its application was needed for a long time before the pupil seemed to feel its influence, enquire whether other practitioners have observed, after its application, a degree of inflammation, out of all proportion to the good preparation and other circumstances of the case, supervene? The extract used in these two cases, was procured of such as could be obtained at the time for those operations, and may not have been of the best. Or, as both of these patients were old, and were black, it is possible that it was the rigidity of old age, which being hard to yield, required too long application of the article.

For many years, I have been in the habit of recommending freely its use to my private pupils, and for several years past in my public instructions, under the name of Dilating Pomade; not only for the relaxation of the os uteri in cases of a fixed hardness thereof; but also for promoting its more prompt relaxation in those cases of labour in which general convulsions are repeated at every period for pain; also in those cases of that rigidity of the os uteri which retards the progress of the first stage of labour, and which is the most common, troublesome resistance in the first stage. But it has not fallen to my lot to have an opportunity, when it was at command, for using it in these convulsions; nor have I yet been informed of its success or use in such cases. I think it worthy at least of trial.
Chaussier's ointment contains 3 i. j. extr. Belladon. to 2 i. simple ointment. Prepared Lard will be found better than the simple ointment, especially in winter.

It should be remarked that none of the extracts are subject to greater variation of power than that of Belladonna, as we find it in the shops.

ARTICLE VII.

Cases with observations. By F. M. Robertson, M. D. of Augusta, Geo.

Those who have devoted their attention, in any degree, to the subject of Phrenology, are aware of the function assigned to the cerebellum, in the arrangement of this system. The science not only recognises separate and distinct elementary faculties, but these faculties are manifested by means of separate and distinct cerebral organs. Appeals are made, by those who advocate the science, not only to the physiological laws which govern the progressive developement and decline of the encephalic mass, but also, to its anatomical structure, the pathological state of the organs, and the derangement in the manifestations of the functions dependent thereon. From these sources, a mass of evidence may be accumulated, which will almost set opposition at defiance; for one fact is worth a volume of abstract reasoning; and, while the flimsy tissue, of which the latter is composed, is made to vanish before the superior light of truth and observation, the former stands unaltered in its intrinsic nature.

Many cases, having the same bearing upon this point, as the two we are about to relate, may be found in the surgical observations of Baron Larrey—some of them are so remarkable, and apparently, unnatural, that they would at once appear questionable, was it not that the veracity of the author stands "above suspicion."

Case 1st. On the 6th of October, 1834, I was called to a negro man between thirty-five and forty years of age, who had fallen through a dray while the horse was in motion. In descending, the back of his head and neck struck one of the cross-
bars of the vehicle with such force as to produce a severe concussion and fracture of the fourth and fifth vertebrae of the neck. The details of the case, so far as relates to the symptoms consequent upon the fracture of the vertebrae and compression of the spinal marrow, and the appearances on dissection, are recorded in another Medical Journal.* The patient lived thirty-three hours after the accident occurred. On the day after the injury was received, from his having voided no urine, a distention of the bladder was feared, to obviate which the introduction of the catheter was proposed. On examining the parts, previous to the introduction of the instrument, the penis was found to be in a state of rigid erection. The catheter was introduced, but no urine followed. The penis continued in a state of priapism until the death of the patient, and though the instrument was introduced repeatedly, not more than an ounce of urine came away. Upon pressure above the pubes, no marks of a distended bladder could be observed. No twitching of the muscles, or the slightest convulsion occurred during the progress of the case; so that the priapism could not be accounted for upon the grounds of a spasmodic action. Doctors Cunningham, Patterson and J. E. Bacon visited the case with me, and the two last-named gentlemen witnessed the introduction of the catheter. Independent of the fracture of the spine, a severe blow was received immediately over the region of the cerebellum. It is to be regretted that the examination, post mortem, could not have been carried beyond the fractured portion of the spine; but as this was performed clandestinely, it was impossible, under the circumstances, to proceed further.

Case 2d. This case occurred during the late Seminole campaign, and was related to me by Dr. Ogleby, the Surgeon to the Georgia Battalion of Volunteers under Major Cooper. In the engagement with the Indians, in what is termed the cove of the Ouithlacoochee, on the morning of the 31st March, Mr. Robinson, a member of the Louisiana Volunteers, received a rifle ball in the back of the head. It entered behind the ear, immediately over the region of the cerebellum, and penetrated through the skull, and was supposed, by his medical attendants, to have lodged in the substance of this portion of the encephalon.—His symptoms were those usually developed by such injuries.

and contrary to the expectations of his friends, he lived several days after the wound was received, notwithstanding the unfavorable circumstances under which the army laboured relative to hospital comforts and suitable transportation for the sick. As the main body of the army took up the line of march for Tampa Bay, on the 1st of April, he was left, under the care of Dr. Ogleby, at Fort Cooper. In the progress of the case, the Doctor found it necessary, in consequence of the accumulation of urine in the bladder, to introduce the catheter; and, to his surprise, when the penis was exposed, for the purpose of performing the operation, it was found to be in a state of rigid erection. The instrument was introduced and the urine evacuated, but the penis remained in a state of permanent erection until the death of the patient. The reaction, of course, was considerable after the reception of the injury, and it is reasonable to suppose that the portion of the encephalon nearest the foreign body must have suffered most, from the consequent inflammation.

In this case one might suppose that the priapism was occasioned, partly, by the stimulus of the excessive quantity of urine accumulated in the bladder; but, this supposition is completely set aside by the first case, in which no urine at all was secreted for nearly thirty-three hours, and yet the priapism was as complete as in the second case; and again, in the latter case, the evacuation of the urine produced no change whatever in this singular symptom.

Those who have any curiosity to look further into this subject, are referred to the work of Gall on the functions of the brain, Spurzheim's system of phrenology, and Baron Larrey's surgical observations. The object of this article is not to discuss the principles of phrenology, or to enter into an elaborate defence of the science, against the many unfounded and unjust imputations which have been brought against it, but merely to give two cases, which certainly claim some merit as facts in proof of the science. Many of our readers will be inclined, no doubt, to underrate the bearing which these cases have upon the point in question, but we feel assured that strict observation cannot fail to render almost positive, even with the most skeptical, many of the positions maintained by the advocates of the doctrine; for the truth of the fundamental principles of phrenology may now be considered as established upon too firm a foundation to be
overthrown by the ridicule of its opponents. The science has recovered from the momentary shock which was given to it by this once powerful engine. Facts are now looked upon as more important than opinions, though the latter may claim high sources as their origin, and appeal to the consecration of antiquity. These are no longer a barrier to the investigator into the laws of nature, and fashion now possesses no terrors to him, who seeking for truth, resorts to the universal volume, in which the hand of Infinite Wisdom has inscribed His immutable laws. The science of phrenology is based upon observation, and our opponents must resort to the same course before they can hope to arrive at their ultimate end. Ridicule we do not fear, and an appeal to observation is all we ask. If the science be contrary to facts, let it perish;—but, if supported by the truths of nature, its own omnipotence will vanquish every foe.

Augusta, July 1st, 1836.

ARTICLE VIII.

Remarkable case of fracture and depression of the parietal bone, from which the patient recovered, without the operation of trepanning. By B. B. Strobel, M. D., Lecturer on Anatomy and Surgery, Charleston, S. C.

I was sent for in haste on the 14th day of March, 1830, at 4 o'clock, A. M., to Mr. L*****, on board of the French ship Isaie. He was lying on the deck in a state of extreme prostration, uttering a feeble cry. His extremities were cold, countenance pale, lips livid, and pulse scarcely perceptible.

The first indication under these circumstances, was of course to produce reaction. I ordered off the crowd which had collected, so as to admit the access of fresh air, and had the patient's head sustained by an assistant, whilst I dashed cold water in his face. Reaction ensued, and the patient was conveyed
upon a litter to an adjacent house, and was placed in an airy room upon a comfortable bed.

The patient being now in a situation where I could operate advantageously, I proceeded to an examination of the injuries which he had received. I observed an extensive lacerated wound of the scalp, corresponding to the right parietal protuberance, and by the introduction of my finger into the wound, ascertained the existence of a fracture and depression of the parietal bone. The fracture was about fourteen lines in length, extending in an oblique direction from the anterior superior to the posterior inferior angle of the bone. The depression, which was very evident to the touch, was from six to eight lines in depth. My attention was next directed to an injury of the right leg, where I found both bones (the Tibia and Fibula) fractured. The extremity of the tibia projected through the lacerated integuments on the internal side of the leg, about four inches above the ankle joint. The patient was about thirty-five years of age, of good habits and sound constitution. The following statement was made to me of the accident by which these injuries had been inflicted:

Mr. L** * * * * was first mate of the ship, which had been "hove down" for the purpose of examining her keel. The necessary repairs being completed, she was righted, and two sailors were ordered to unreave the fall and send down the block from aloft. They neglected to make it fast to a rope, and threw it off from the main top, from whence it descended on the head of the mate who was walking on deck. He was immediately struck to the ground, falling on his left side, and receiving the mass on the outside of his right leg, both bones being fractured by the concussion.

That symptoms of compression would ensue, was to my mind almost certain, when I took into consideration the severity of the blow, and the extent of fracture and depression. I therefore prepared my instruments, and held myself in readiness to perform the operation of the trephine. Indeed, I was disposed to proceed at once to the operation, as night was rapidly approaching, and it seemed better to operate by daylight in anticipation, than to wait for symptoms of compression, with the chances of an operation by night. A moment's reflection, however, and a reference to the opinions of the best authorities, de-
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terminated me to defer it, until urgently demanded by the necessity of the case.* In the mean time, I adopted such precautionary measures as were calculated to keep down excitement, and to prevent determination to the head. The wound of the scalp was freely laid open, and fomented with cloths wrung out in warm water to encourage hemorrhage, and a stimulating injection administered. The injury of the leg was next attended to—the bones were properly adjusted, and easily kept in place by the ordinary splint and bandage, the fracture being transverse.

I visited the patient several times in the course of the evening, and saw no material alteration, the hemorrhage from the wound had been considerable, the injection had operated well. The

* We are principally indebted to Desault for this improvement in modern Surgery. By the ancients the operation was performed in all doubtful cases. Their practice was adopted and received without its merit being questioned, until that justly distinguished Surgeon was induced to doubt its propriety, from having remarked that it seldom succeeded at the Hôtel Dieu at Paris. He therefore declined trepanning in cases of fracture, without depression, or effusions of blood, and this practice, which in his hands was attended with great success, is generally adopted now-a-days.

Sir Astley Cooper in his lectures commends this course.

Larrey, in his Surgical Memoirs, page 117, makes the following remark: "The trephine should not be applied in wounds of the head, accompanied by fracture of the bones of the cranium, whatsoever may be the extent of the fracture and the number of the radiii, if the fragments of bone be not driven inwards, no foreign bodies present, or symptoms of compression not very evident."

Boyer in his Traité des Maladies Chirurgicales, entertains similar opinions:

"Mais lorsqu'il n'y a ni enfoncement, ni épanchement de sang, on ne trépane point; on s'en tient aux moyens généraux, tels que les saignées du bras et du pied, les purgatifs, surtout l'étiétique ou lavage, qui procure des evacuations alvines abondantes sans irriter beaucoup le tube intestinal."—vol. v. page 75.

"The instances of death, after the setting in of inflammation from very trifling causes, are of almost daily occurrence, and would induce us to anticipate its certainty after all violent injuries: but it is a great mistake, now acknowledged by the best Surgeons, to suppose that every depression requires an elevation, and every fracture the interference of art; although it is a common one fallen into by the juniors: and even among the older class I have seen operations attempted on very unnecessary occasions."—Heunen's Principles of Military Surgery.
fomentations were continued to encourage the oozing of blood. About 8 o'clock at night, however, a very evident change for the worse occurred. The pulse had risen, was full, hard and slow. The patient complained at first of a violent head-ach, which was soon followed by drowsiness, stupor, and difficult and stertorous respiration. Notwithstanding the unfavorable state of the case, I resolved to make one more effort for the relief of the patient, before resorting to the operation. My impression was, that the symptoms of compression were produced rather by a fullness of the vessels, than by the depression of the bone. Had the symptoms depended upon the latter cause, they would have shown themselves, soon after the occurrence of the accident. Four hours had, however, elapsed, before they began to be manifested—it seemed, therefore, reasonable to conclude, that the subsequent determination of blood upon the brain, which took place, when full and perfect reaction ensued, was sufficient to account for their occurrence. The remedies which I proposed, if they proved beneficial must be prompt and efficient in their action—but little time would be lost in giving them a trial, and there was a possibility of avoiding a serious and dangerous operation.

I tied up the arm and bled the patient until he fainted—applied cloths wrung out in cold water to his head, placed his feet in a tub of hot water, rendered more stimulating by the addition of mustard, and gave an injection composed of spirits of Turpentine and Molasses.

The conjoined effect of these remedies was soon evinced. The difficult and stertorous breathing, stupor, drowsiness and head-ach disappeared, and the pulse became soft and natural. I was not, however, satisfied with having attained this much, but determined if possible to prevent a recurrence of the unpleasant symptoms. Cathartics were not only likely to keep up a constant drain from the bowels, but were also calculated, by their irritating impression on the intestinal tube, to counteract determination to the head on the principle of revulsion. The furred condition of the tongue, also seemed to indicate the propriety of their administration. I therefore ordered 15 grains of Calomel to be given immediately, and in two hours after taking it, a wineglass full of a saturated solution of Epsom Salt every hour "pro re nata."
I visited the patient at 12 o'clock. His Medicine had operated several times. No return of head ach—pulse natural—skin warm and moist—directed the solution of Salts to be continued, the same dose, but at intervals of two hours.

March 15th, 5 o'clock, A. M.—The patient doing well, pulse natural, skin moist and warm, tongue clearing off, no uneasiness about the head. The medicine had operated ten or twelve times, producing large watery stools, mingled with bile. Ordered the Cathartic to be discontinued, and the patient to be kept on a diet of arrow root, rice or barley water, and cold water. From this hour the patient complained no more of his head, although he suffered much from his leg. I visited him several times during the day, and observing no returning symptoms of compression—shaved the scalp and approximated the edges of the wound with adhesive straps.—It healed as kindly as could have been expected, in part by granulation, and in part by the adhesive process. The patient was kept on a rigid system of low diet for twelve or fourteen days, to prevent a recurrence of the unfavorable symptoms. In the course of five weeks the wound of the scalp, had entirely healed—the depression of the bone remaining very evident. The fracture of the leg had so far united at the expiration of six weeks, that this individual was enabled to return home in the vessel.

After the recovery of the patient, I had the curiosity to make an examination of the block. It was what sailors term, "a three sheave block," used at ship-yards for heaving down vessels. It was bound with iron hoops or straps, and weighed two hundred and fifty pounds.

It really seems surprising, (almost incredible,) that such a mass should have fallen from a distance, upwards of thirty-five feet, on the head of a man, without instantly killing him. But the result is easily explained by a reference to mechanical principles. Had an iron ball or any hard irregular shaped substance fallen from the same height upon the head of an individual, it is more than probable, that the fracture and depression which would have resulted, together with the consequent injury of the brain, would have been attended with fatal consequences, and the reason is obvious—the whole momentum would have been communicated at a given point. Here, on the contrary, we have a large mass of great weight, with smooth round-
ed surfaces striking \textit{obliquely}—the momentum being so great as instantly to throw the body from the line in which it was falling. * Had the same mass fallen from the same distance in a straight line, instead of striking \textit{obliquely}, the force which the body would have offered, would probably only have shattered the cranium to atoms, but would in all probability have crushed the bones of the inferior extremities, as well as many of the body generally. † It is thus by the application of the principles of Physical Science, that we are enabled to explain the nature of injuries, and not unfrequently to deduce our prognosis.

* Mr. Quesnay, in an essay on the use of the trephine in doubtful cases, (published in the 1st volume of the \textit{Memoires de l'Academie Royale de Chirurgie},) states "that a stone of twenty pounds weight fell perpendicularly from a height on the head, and occasioned no fracture, whilst a blow from the fist on the temple produced a fatal effusion.” There can be no doubt that the force of the blow from the stone was greater than that inflicted by the fist. How then can we explain the different results, except by the angle of incidence!—the blow from the fist being direct, or in a straight line, whilst the stone must have struck obliquely. I once made a post-mortem examination of a woman who died from a rupture of a blood vessel on the brain, producing effusion within the cavity of the cranium. This injury followed a blow on the top of the head from the fist of a man. The woman was an habitual drunkard, and had brought on a condition of the vessels, which predisposed them to rupture. It therefore became a very nice point of medical jurisprudence to determine, whether such a blow under other and favorable circumstances would have proved fatal.

† By calculation the momentum may be ascertained with some degree of accuracy. The following process may not prove uninteresting.

Let the quantity of matter \((M) = 250\) pounds. Space through which it fell \((S) = 30\) feet. Space through which a body falls in one second, \((M) = 16\) feet.

\(\text{Then (Olmstead's Mechanics, Art. 53.)} \)

\(T \text{ (time of falling)} = \sqrt{\frac{2}{g}} \times \sqrt{\frac{32}{10}} = \frac{5}{4} \text{ seconds nearly} \)
\(V \text{ (velocity acquired in that time)} = 2 \times 16 \times \frac{250}{32} = 30 \times 16 \times \frac{250}{32} = 30 \times 60 = 1800 \text{ feet per second} \)

The momentum would therefore be equal to \(M \times S = 250 \times 32 = 8000\), a force sufficient to crush a man's skull to pieces, had it fallen upon it directly. This however did not occur in the present instance. Let us therefore suppose that it varied from the perpendicular 30 degrees, i.e. impinged upon the head at an angle of 60 degrees. This by the resolution of forces would give for its momentum, the side \(AB\) of a right angled triangle, right angle at \(A\), in which the hypotenuse \(BC\) represents the direct force 8000 lbs. The angle \(C\) being 60 degrees, and \(A\) its complement.
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(Cambridge Trig. Art. 32.)

\[
\begin{align*}
BC &= 8000 \\
A &= 30 \\
B &= 60 \\
\text{As Radius} &= 10,00000 \\
\text{is to BC.} &= 8000 \\
\text{so is sin. C} &= 30 \\
\text{to AB} &= 4000 \\
\end{align*}
\]

(See also Art: 18 of the same.)

Here the momentum is reduced to just one half of what it was at first. Four thousand pounds would however have crushed the skull to all intents and purposes, as effectually, as 8000, had the head been confined in its position by a force equal to the momentum. But as the resistance offered, was only that of the muscles together with the inertia of matter, which in this case may be estimated at 100 lbs., we have the force of infraction greatly modified. For action and reaction being equal—it is evident that the force of the stroke must have been equal to the momentum lost by the body (block) in the concussion. This we ascertain as follows: (See Cavallo part I, art. 23, 24.)

\[
\begin{align*}
\text{A (Block)} &= 250 \\
\text{B (Head)} &= 100 \\
\text{V (velocity required to make the momentum of 250) } &= 4000 \\
\frac{ABV}{250 \times 100 \times 16} &= 400000 \\
\frac{A + B}{250 + 100} &= 350 \\
\end{align*}
\]

Momentum lost, or force of percussion, supposing the block to have struck with its center, but as it probably did not strike with its centre—the force of the blow would again be modified by this circumstance, and probably not exceed a force of 5 or 600 pounds. This proposition may be rendered more intelligible by supposing an iron or other metallic weight of 1000 lbs. to fall directly from a moderate height, upon a leaden ball resting on an iron floor—the effect would be to flatten the ball. If however both were freely suspended and the weight made to impinge against the ball from a distance equal to the height from which it had fallen directly upon it, the effect would be not to flatten, but to send it off with great velocity.
PART II.—REVIEWS AND EXTRACTS.


It is not every bearing of our professional duties which is calculated to add directly, and some of them not even remotely to the dollars and cents of our annual income. Indeed, some of the most dignified and honorable duties—those to which the profession is largely indebted, for the respectable rank it enjoys amongst the liberal and exalted callings, instead of ever tending to pecuniary gain, have only for their reward the happy consciousness of having discharged duties to humanity at our own expense—of having done good to our friend, our neighbour; not only by being accessory to his welfare, but also in effecting this good at the least possible expense to him. Such are the duties of searching out and effecting the correction of local causes of disease— instructing the community on the subject of injurious customs, habits or fashions; as imprudence in dress, indulgence in the enervating, health-destroying luxuries of life, &c. &c.

These duties when faithfully performed, tend most certainly to lessen, to a greater or less extent, the sum of physical evils to which humanity is subject; and thereby diminish the calls on the practitioner. Their faithful and abundant performance is properly considered as an indication of the in-dwelling of that humanity and benevolence which are the diamonds and rubies among the jewels in the professional casket. If aught in man can be disinterested, such must be these noble deeds. And here we would not withhold a tribute of respect due to the medical men of the world, and particularly of the United States; not individually, but as a community, for the noble stand they have taken in the temperance reformation.

Regardless of the effects of the wrath of those whose income from the grossly immoral—manslaughtering custom of trafficking in intoxicating liquors would be lessened by their successful influence on the community, they have exercised a noble decision, and independence of character, most honorable to any fraternity or class of men. They have, in many instances, knowing that their daily bread must come from the popular favour around them; and, regardless of self-interest in the virtuous hope of arresting the fatal progress of a mighty and devastating torrent, filled with the worst of physical and moral enemies to humanity, dared to bring forward the armamentary of their conclusive testimonials and pathological science, and occupy with unwavering firmness the posts of greatest danger.
Nor have they been merely passive watchmen on the rampires of health and morality, but have led the croisade against a ruinous and mighty enemy to both, which was cherished, like the frozen viper by the husbandman, in the houses of their best friends—sanctioned, like all vice familiarized by universal approbation; and made strong and resisting, like the chains of superstition, by the habit of centuries.

We have been led to these reflections by reading the little pamphlet described at the head of this article, and searching for the reason for the infrequency of the prescription of mineral waters by physicians. As medicinal means afforded by a kind Providence for the relief of human afflictions, mineral waters should be regarded as amongst the most important. Nor are there any good reasons why they should not be used in medical prescriptions with as much promptness as any other articles of the materia medica.

We may say, and with truth too, that these are articles with which, from their distance, and want of observation of their operation, we have not become so familiarly acquainted, as with the articles of commerce which are found with the apothecary. But this should not be so. These natural productions are not less worthy of our attention than other mineral, vegetable and animal productions, which make up the sum of our res medica. For when the whole assemblage of all things and circumstances brought into operation by a travel to some watering place, is better calculated to meet the necessities of our patients, than our protracted and too often unsuccessful attempts to imitate by art what nature has better prepared, it becomes our imperious duty to prescribe them. Nor will that ignorance of them which may prevent our knowing their superior powers, fully excuse us; for it is not only the duty of the practitioner to do for his patient the best he knows, (a common, but not a very flattering recommendation by the way,) but it is to do the best that can be done.

The infrequency of these prescriptions cannot be attributable to the desire of retaining the business of the patient in hand. Such a charge cannot hold at the present day amongst those who merit a place in a profession in which the purpose of making a fortune, or even a competence, must be secondary to that of doing good to suffering humanity. And such is the profession of medicine; and he who cannot subscribe to, and act upon this principle, should be as promptly proscribed as one who would traffic or indulge in the use of intoxicating drinks.

In the pamphlet we are presented at once with two most important medicinal powers; the productions of no Swain nor Morrison imposition or secrecy; but of the pure and perfect laboratory of nature, accompanied with a qualitative analysis of their elements, and satisfactory attestations of their operations as medicinal powers.
For the benefit of the profession, and through them, of the community at large, we give a few selections from the pages of the pamphlet itself: for we think these, as well as most other medicinal means, suffer great loss of good effect, and consequently, loss of character—to say nothing of the injuries they effect, in consequence of a promiscuous and unscientific adoption of their use. And we would here say in passing, to such (if such there be) as would dislike too much the loss of their daily attendance, to recommend their patients to a course which would compel their absence; that it were better to make the prescription, and satisfy their thirsty avarice by a bold demand at once on the pockets of their employers for the prescription, than not to make it at all.

On the first page, the location of the Springs is thus described:

"The Grey Sulphur Springs are situated near the line, dividing the counties of Giles and Monroe, Virginia; on the main road leading from the Court-House of the one to that of the other. They are three quarters of a mile from Peterstown, nine miles from the Red Sulphur, and by the County road, twenty and a quarter miles from the Salt Sulphur Spring. In traveling to the Virginia Springs, by either the main Tennessee or Goodspur Gap Roads, and crossing the country from Newborn, by the stage road to the Sulphur Springs, the Grey Sulphur are the first arrived at. They are thirty miles distant from Newborn. The location is such as will admit of many and varied improvements, which when completed, will render this spot an elegant and desirable resort during the summer months, independent of the high medicinal properties of the mineral waters."

On the same and following pages, we have a description of the Springs:

"There are two Springs at this establishment, situated within five feet of each other, and enclosed in one building. Although rising so near to each other, yet they differ most materially in their action on the system. Both appear to be peculiarly serviceable in dyspeptic cases, and in such as originate in a disordered state of the stomach—the one, in those in which inflammation exists, the other in such as proceed from torpidity. They have hitherto been known as the large and small Springs; but having succeeded towards the close of the last season in procuring a much larger supply of water at the small Spring than is afforded at the large, a change of names became necessary. The large will hereafter be known as the Anti-dyspeptic, and the small as the Aperient, which names will serve to point out their peculiar characteristics.

"These Springs have been classed by Professor Shephard, as "Alkaline Sulphurous," a variety so rarely met with, that another is not known to exist elsewhere in the United States. The waters are beautifully clear, and highly charged with gas, which render them light and extremely pleasant, especially that of the anti-dyspeptic Spring, which produces none of those unpleasant sensations so frequently felt on the first drinking of mineral waters.

"When first purchased, some of the water was submitted to a chemist for analysis; the quantity, however, was too small for him to ascertain all its ingredients. A more recent examination has been made by Professor C. U. Shephard, who has furnished us with the following abstract of an article
which appears in the April Number (1836) of Professor Silliman’s Journal of Science and Arts."

"The following is the most satisfactory view which my experiments enable me to present of the condition of these waters:

Specific gravity, 1,003.

**Soluble Ingredients.**

Nitrogen,
Hydro Sulphuric acid,
Bi-Carbonate of Soda,*
A Super Carbonate of Lime,
Chloride of Calcium,
Chloride of Sodium,
Sulphate of Sode,
An Alkaline or earthy Crenate, or both,
Silicic acid.

**Insoluble Ingredients.**

Sulphuret of Iron,
Crenate of Per Oxide of Iron,
Silicic acid,
Alumina,
Silicate of Iron.

My experiments do not permit me to point out the differences between the two Springs with precision. The new Spring appears to give rise to a greater amount of hydro-sulphuric acid, as well as of iron and silicic acid. Probably it may differ in still other respects. I have not examined it for Iodine or Bromine.

As no regular analysis was attempted, the quantities in which these several ingredients exist, still remain undetermined. That they are in different proportions in the two Springs, is evident not only from their depositories, but also from their action on the system. The action of the anti-dyspeptic Spring is diuretic and gently aperient, tending to restore the healthy performance of the functions, and reduce or diffuse the local irritations of disease. The Aperient Spring while it possesses all the alkaline properties of the other, has an aperient and alterative action. Possessing more iron, (of which the other has but a trace,) it acts more powerfully as a tonic, whilst its other ingredients cause it to act in some cases as a very powerful aperient.

As these Springs have been visited by invalids, only during the two last seasons,—it is reasonable to suppose that all their properties have not yet been discovered, nor all the cases ascertained in which they can be beneficially used. In fact, owing to the small quantity of water furnished hitherto by the Aperient Spring, its qualities have been but little tested, and there can be no doubt, (judging from its constituents) that it will be found equally salubrious as the anti-dyspeptic Spring, only better adapted to another class of cases. To give a general idea of the properties of these waters, we might say that they are peculiarly serviceable in those diseases which originate in a disordered state of the stomach and bowels, and also in hepatic affections. It is proper, however, to enter more into details, and we therefore submit the following synopsis of the medical properties of the anti-dyspeptic Spring.

**Medical Properties.**

1. It relieves nausea and headaches, arising from disordered stomachs.
2. Neutralizes acidity, and if taken at meals, or immediately after, it has

*It cannot be determined whether free carbonic acid exists in these waters without going into a quantitative analysis.—C. U. S.
a tendency to prevent those unpleasant sensations so often experienced by invalids, from indiscretion in dieting.

3. Is an excellent tonic, exciting appetite and imparting strength to digestion.

4. Quiets irritation of the alimentary canal.

5. Controls and lessens the force of the circulation when unnaturally excited by disease, and often in this way, is remedial in internal inflammation of the organs.

6. It tranquilizes nervous irritability.

7. Is a mild and certain expectorant, often allaying dyspnoea, and promoting recovery from chronic ailments of the chest or wind pipe.

8. It alters the action of the liver where this has been previously deranged, in a manner peculiar to itself, and under circumstances in which the ordinary alteratives are forbidden by reason of their exciting, or otherwise irrelevant properties.

9. It is also sudorific or diaphoretic; and

10. When taken at bed-time, often proves itself soporific: apparently stilling that indescribable, but too well understood inquietude, which so frequently and unhappily interrupts or prevents the repose of the invalid, and especially of the dyspeptic.”

Next follow seventeen minutely and well detailed cases which have been subjected to the powers of these waters, which tend most satisfactorily to sustain the above account of their medicinal virtues: to which we may add, by looking over these cases, a peculiar and valuable power of allaying vascular irritation, as to reduce with great promptness the morbid frequency of the pulse, &c.

In addition to the testimonials of the medicinal powers the pamphlet contains,—the originals of which, with their proper signatures, are in the possession of John D. Legare, of Charleston, we have found in several instances corresponding evidence in the accounts given by invalids who visited these Springs in 1835, and—whom we have conversed.

The pamphlet concludes with the decided and favorable judgment of Professors Moultrie and Dickson, of Charleston, from the testimonials submitted to them: and the time has gone by when such men as Moultrie and Dickson may be expected to give their names to an expression of approbation which is not fairly deduced from sound premises.

Rostan on Diagnosis.

We know of no better appropriation of a few of the pages of this journal, than to the insertion of the following extract from a work rarely found in the hands of the American practitioner;
to whom it is of too much practical importance in every day's business, to await the circulation and reading of an entire translation of the whole work, should it be ever offered to the American public.

We feel assured that a diligent attention to it cannot fail to add greatly to the facility and clearness of Diagnosis, and consequently to the correctness and value of therapeutic efforts.

On the mode of interrogating and examining a patient, and of recording cases. Translated from Rostan's Work on Diagnosis.

Nothing is more embarrassing to the physician commencing the practice of his profession, than the act of interrogating and examining a patient. Indeed, this part of the art, of undoubted importance, since without it we can arrive neither at a sure diagnosis nor a rational treatment, is so neglected, that few practitioners, even among those of great experience, acquire themselves in a creditable manner. We frequently remark the incoherence and disorder of their questions, their uncertainty and hesitation; losing sight of certain fixed principles, we see them passing without motive, from one object to another, between which there is no connection. They repeat unnecessarily the same questions, and those immaterial; they forget the most important points; they confound subjects the most dissimilar, and separate those having the greatest similarity; and to crown the evil, they are involved in obscurity, and by the merest accident, arrive at a just diagnosis and at a rational plan of treatment. All these disadvantages are the result of a defective order—of a want of method.

On first approaching a patient, we almost involuntarily examine his exterior: his physiognomy first attracts our attention; at first sight, we form an idea of his age, his strength, his moral state, &c., circumstances of great importance, connected as they are with the prognosis and the therapeutic indications. This first examination should not be confined to the head, but extended to the whole surface of the body; but unfortunately, this can be done only in a very few cases, particularly in private practice. At least, we must not dispense with the examination of the part affected; if neglected, it is at the hazard of committing the gravest errors of diagnosis and treatment. Some examples will illustrate the utility of this investigation. An aged female, of limited intelligence, was brought to the infirmary, &c. She complained of a violent pain in the abdomen, about the left iliac region. The face was animated, the skin hot and moist; the pulse strong and frequent, tongue dry, thirst urgent; otherwise the digestive functions in a natural state: little or no change in the other organic or animal functions. The abdominal pain was increased by pressure and by motion. Behold our diagnosis! The phenomena of reaction [the strong pulse, flushed face, thirst, &c.] indicate an acute state of disease, doubtful inflammatory; the local symptoms point out the abdomen as its seat, but the digestive functions being in a normal state, it cannot be in the organs of this function; as the slightest pressure is painful, the disease must be superficial; and as the slightest motion is painful, then the organs of motion must be affected. The muscles of the abdominal parietes must be diseased; although rheumatism, especially in old subjects, is not usually attended with such marked symptoms of general reaction. Satisfied with this reasoning we left the patient, after prescribing a weak infusion of cumfrey, an enema, diet and rest; when a student, having exposed the part to view, discovered the existence of zona! This lesson impressed us more forcibly than ever with the necessity of using our senses, as the only means of positive knowledge.

A patient after a fall, experienced pain in the left side of the chest; there was also cough, and bloody expectoration, with symptoms of general reac-
One of the most experienced and attentive pupils was charged with the examination of the case. He arrived at the conclusion that the disease was *pleura-pneumonia*—as much as the cough and bloody expectoration indicated the lungs as the seat of the affection; and although the pain, very violent on pressure and on the motions of the chest, might possibly be seated in the parietes of the chest, yet the general symptoms indicated a more profound affection of the lung itself:—moreover, by the stethoscope the crepitous note was discoverable. **Behold! there was a fracture of the ribs.** Assuredly, an attentive examination of the diseased region would have secured him from falling into so grievous an error.

The examination then of the exterior of the body, and especially of the regions diseased, is of the utmost importance.

We should propose it to ourselves as the definite object of this examination of a patient, to obtain a knowledge of the disease and of the curative indications, *as promptly and certainly as possible.* There are those physicians who continue this examination for a length of time. In some rare cases this method may be preferable. People generally love to receive our attention to their cases—they love to entertain their physician with the least circumstances of their constitution, their antecedent diseases, their manner of living, &c. The physician in listening to these superfluous details, and even in encouraging them, secures the confidence of his patient, and inspires him with the hope of relief at his hands, and thus produces a cerebral disposition favorable to the resolution of the disease:—for the brain, holding all the organs of the economy in dependence upon it, we perceive that its state, whether good or bad, will exercise upon them an influence salutary or hurtful. But, how many circumstances there are under which this protracted method would produce unhappy results? In all the diseases of the respiratory organs—for example, haemoptysis, per-pneumonia, pleurisy, catarra, phthisis, is it not very dangerous to encourage the patient to speak for a length of time? If a suffering organ is thus exercised, shall not the disease be increased? Will not the spitting of blood be more abundant, or if checked, will it not thus be renewed? Will not the inflammation of the various tissues be thus increased in intensity? In such cases, the man whose office is to soothe and quiet pain, and heal the sick, may thus by this method, become himself the cause of increased suffering, and even of death. Those same remarks are strictly applicable to the diseases of the brain;—indeed, in these last cases, by multiplying your questions, you act directly upon the diseased organ. It is then, in the great majority of cases, of the utmost importance, to trouble the patient with as few questions as possible, and to accomplish our object promptly.

The first question that we should address to a patient is this: **Where is your pain?** This question, which at first sight seems so simple, long experience and reflection commend as the best. Patients are remarkably prone to give their opinions about their diseases; one will tell you he has a nervous affection, another that the bile torments him; this one that his blood is diseased, and the other that the humour is disordered; and females are ready to refer to milk diffused and misplaced as the cause of their diseases. We will not fail to receive some such answer, if instead of the question above, we ask—**How are you?** Now, if the patient answers, I have a nervous affection, &c., we have gained nothing,—but in reply to the other question, he will very generally indicate both the function and the organ diseased, which is an important step towards the knowledge of the disease. Notwithstanding the precision of this question, it is frequently impossible to check this disposition to speculate upon their diseases. Sometimes they will mistake one organ for another, complaining of pain in the stomach; when the chest is affected, &c.—it is therefore important, in order to avoid all possibility of mistake, to insist on the hand being applied over the painful region.
Rosstan on Diagnosis.

1836.

There is one other question not less important than this first one, which will much abridge the labour of investigating the case. This question is eminently analytical—*Have long have you been sick?* If the disease be recent, we then at once exclude from our attention all the chronic diseases to which the organ now affected is liable—if it has existed for a long time, we then concentrate our attention upon its chronic affections. This question then is scarcely less useful than the first.

After discovering what function is injured, we should pursue the examination, until we shall have passed in review, all the morbid phenomena which it is capable of presenting. This object accomplished, we should then fix our attention upon the organs most closely connected with the one diseased, and examine their state with equal care; indeed, we should then proceed to examine all the organs and all their functions, without any exception. This precept should never be neglected, for by this examination, thus carefully made in the commencement, we acquire an exact knowledge of the sympathetic phenomena. When an organ is profoundly altered, it reacts upon others, disturbing their action and altering their organization; how shall we be able in the progress of the disease, to recognize such alterations as consecutive, if we have failed to acquaint ourselves with the state of these organs at its commencement?

Again, by this general examination, we inform ourselves of the existence of concomitant diseases; for it frequently happens that many diseases exist simultaneously in the same individual. The patient then points out the most prominent of these diseases, and if the physician be satisfied with the diagnosis of this one disease, he will overlook the others, and may subject his patient to a fatal treatment.

This, unfortunately, is not an unfrequent occurrence. Satisfied with discovering the existence of one disease, we are disposed to forget that others may exist. We cannot, then, insist too much upon this precept, that we examine with the most scrupulous care all the organs of the animal economy and the state of all their functions, at the commencement of every disease.

After examining the patient in this manner, we should acquaint ourselves with the state of the organs in the various cavities;—for this purpose we resort to percussion and auscultation for the chest, percussion and feeling, for the abdomen, &c.

Percussion of the thorax is executed in the following manner: the patient should be seated, and present most prominently the parts of the thorax to be examined—if we examine the back, the head should be bowed, the spine curved, the arms folded on the breast;—in this attitude, the back is most fully developed, and its muscular covering as thin as possible. If we would examine the side, the arms should be alternately raised upon the head, and the body inclined successively to the side opposite the one we are exploring. For the anterior part, the recumbent position is preferable, with the arms separated from the trunk. It is almost needless to add, that there should be as little clothing as possible.

The physician, having united his fingers in the form of a cone, strikes successively the different regions of the thorax, taking care to compare the corresponding parts of the two sides only, and to strike these always at the same angle—not comparing the sound which percussion renders, when made upon the intercostal spaces, with that which it renders when made upon the ribs—and proportioning the force to the thickness of the thoracic parietes, and especially to the degree of sensibility of the patient; for there are cases, in which the degree of pain forbids this mode of exploration.

On examining the chest of a sound man, by percussion, we obtain a sound which we may compare to that of a tambour covered with a thick cloth. This resonance is most remarkable at the anterior, superior and lateral part of the thorax;—it is less in the back, upon the shoulder-blades, in the regions of the heart and liver. In some thoracic affections, this reverberation, which depends upon the presence of air in the pulmonary cells, ceases,
and in others it augments. In the first case, we obtain a dull sound, on percussion, which has been compared to that produced by percussion of the thigh; we may then conclude, either 1st, that the air no longer penetrates into the pulmonary tissue; or 2d, that either a tumour or a fluid is interposed between the lung and the side of the chest. If, on change of position, the dull sound also changes its location, and occupies the most depending position, while the clear sound is heard in the most elevated part, we may infer that the cause of dulness is a liquid body.

Percussion is one of our most certain and profitable means of examination. It seldom deceives those who practice it with skill. But it is necessary to pronounce cautiously upon slight differences; that this sign may be valuable, it is necessary that the ear be able to distinguish the difference of sounds from the two sides of the chest, that exists in numerous cases.

As to the increase of this resonance, it depends upon the fact that the thoracic cavity contains more air than natural. As we shall have occasion to recur to this subject, we will confine ourselves to the remark, that this phenomenon may lead us into a singular mistake—it may induce us to believe that the side which resounds most perfectly is the sound side, and the other side is diseased,—which is the reverse of the truth.

But if percussion be thus useful, it is not without its inconveniences. In the first place, it compels us to throw the patient into fatiguing positions, and the efforts he thus makes, may exasperate the disease. In the second place, the acute diseases of the chest in which we chiefly resort to this mode, happening generally in the winter season, it is to be feared, that the impression of the air upon the chest nearly naked, may coincide with the original cause and augment the disease. Finally, we should dread dangers from the act itself, since it is impossible to strike thus in the region of pain, without extending a hurtful shock to the suffering part itself. These inconveniences are such as almost to balance the advantages of this plan; at least, we should resort to it only when the diagnosis is obscure, and when it may furnish some important indication; when the diagnosis is sufficiently clear, we should abstain from it.

Recently, M. Piory has contrived to effect percussion, by applying upon the region to be examined, a thin plate of wood, of metal, or of ivory; by this means he avoids the inconveniences of immediate percussion, and obtains more exact and precise results.

This mediate percussion is less painful than the direct; the shock and commotion of the organs are scarcely perceptible; we may practice it over the clothing and upon soft parts; serous infiltration of the sides of the abdomen or thorax, excessive fat, even a blistered surface will not hinder this mediate percussion. It is more easily practised, and the mode of application being constantly the same over all the regions, there will result no difference of sound occasioned by the process itself which we employ, so that we can determine exactly the regions corresponding with certain organs, measure their dimensions, estimate their consistence, &c. It is in abdominal percussion that these advantages are most conspicuous.

By means of this instrument, M. Piory recognizes numerous varieties of sounds, which he has endeavored to express by the terms femoral, jecoral, cardial, pulmonary, intestinal, stomachical, osteal, humoral, hydatic, &c. We shall not follow him in his definitions, nor in the divisions of the trunk relative to the sound of the organs, in the sound state; these differences of sound may be easily conceived of. By consulting his work, we will perceive the advantages which he proposes to attain, by this mode of examination. Admiring the zeal of M. Piory, and felicitating him upon his efforts at establishing with precision, the diagnosis of diseases, he yet seems

* De la percussion médiate et des signes obtenus à l'aide de ce nouveau moyen d'exploration, &c.—in the College Library.
to us to attach too much importance to this mode of examination, and to deal
much in conjecture; nevertheless, we could but approve this means, even if
it possesses only some of the advantages attributed to it, by this author.
Every thing that sheds light on—whatever affords any aid in appreciating
the different states of the viscera, should be eagerly welcomed.

Mediate auscultation gives us the knowledge of a great many phenome-
na, useful for diagnosis;—this mode of research is so generally practised
now, that we need not describe the stethoscope, the instrument with which
it is performed. We apply exactly, one of the extremities of this instru-
ment upon the points of the thorax to be examined, and the ear to the other.
If we would examine the anterior of the chest, the patient should be on his
back, and on the left side when we examine the right, &c. The patient
should sit up and lean forward when we examine the back.

By auscultation, we explore the voice, the respiration, the râle and the
circulation.

The stethoscope has been employed also, for appreciating more exactly
the crepitation, when obscure, produced by rubbing of the broken fragments
in fractures; and, also, for detecting the sounds which the foetal circulation
produces, which furnish an invaluable sign of the state of pregnancy.

Having spoken of the mode of practising auscultation and percussion, we
must dwell a moment upon that of exploring the state of the arterial circu-
lation—of the feeling of the pulse.

The arrival of the physician generally produces some emotion, either of
fear or hope, &c., which disturbs or accellerates the circulation. We should
therefore wait until he regains a state of calmness.

In whatever situation arteries of a sufficient size are superficial, we may
feel the pulse. It is sometimes of importance to compare the pulsations of
the arteries in different parts of the body. We may feel the pulse at the
temporal, carotid, axillary, brachial, radial arteries, &c.; it is at the
last that the examination is generally made. The crural arteries and
those of the foot may also be used.

Having assured ourselves that there is no obstacle to the free circulation
of the blood, the patient lying on the back, we place the fore-arm in a state
of pronation, we apply the extremity of four fingers over the course of the
artery, so that the ring-finger shall be towards the elbow, and the index-
finger towards the hand of the patient, i.e. feeling the pulse of the right
side with the left hand, and vice versa. If the patient be up, we cause him
to be seated, and place his arm in the position above described. The fingers
of the observer being thus disposed, the hand is steadied by resting the
palm, or simply the thumb upon the posterior surface of the fore-arm; we
thus conveniently exercise different degrees of pressure for determining
the degrees of resistance of the pulse.

The exploration of the abdomen by feeling and pressure, merits special
attention, and furnishes important information. The patient should be
placed in the recumbent position, with the head bowed upon the chest, by
means of pillows, the thighs and legs flexed upon the pelvis and thighs, the
knees separated, the arms extended at the sides of the trunk—a position,
which relaxes most perfectly the muscles of the abdominal parietes, and
thus favors the examination of the viscera within.

In thus examining the abdomen, we should remember that we divide it
arbitrarily into many regions, to each one of which different organs corres-
pond. The knowledge of this branch of anatomy of relations, is indispens-
able necessary to diagnosis; for if we encounter in one of these regions,
phenomena, unobservable in health, we may, with probability, attribute
these to the organs corresponding with this region; the probability amounts
to certainty, if the function of one of these organs is altered in a corres-
ponding manner. Thus we know that the stomach occupies the epigastric
region, extending partially into the two hypocondriac regions; if we find a
tumour in this region, there is a strong probability, that the stomach is the
seat of this tumour, but if the functions of this organ are disturbed, we are
certain of its location.

We should remember, however, that extraordinary instances of displace-
ment of the viscera sometimes occur; we once, for example, found the py-
loric extremity of the stomach in the left iliac fossa. Having placed
the patient in a proper position, we apply the hands carefully at first, but after-
wards more freely over every part of the abdomen. We thus inform our-
selves of the degree of sensibility of these parts, of their suppleness, their
tension, their volume and the tumours they may present. All these symp-
toms are of the utmost importance in the diagnosis; but the tumours of
the parts throw the greatest degree of light upon it. We should examine
with care, the seat, the form, the volume, the consistence, the sensibility
of these tumours; we should remark whether they are moveable or adhe-
erent, temporary or permanent, pulsative or not;—for each of these pro-
perities announces different alterations. The seat indicates the organ, the
consistence informs us of its contents, whether gas, liquid or solid; the pain
indicates the nature of the tumour and the kind of change nature is effect-
ing in it;—its mobility encourages the hope that it is formed of matters
contained in the intestines; in a word, if temporary and changing, it is either
a hernia or formed of matters capable of disappearing; if pulsative, it is
connected with the organs of the circulation.

When the belly is considerably distended, and we suspect it to be either
by liquid or gas, we operate percussion in a peculiar manner. In the first
case, with one hand we strike against one of the sides, the other hand be-
ning placed on the opposite side;—we then feel a kind of liquid column
striking against the opposite side,—this phenomena is called fluctuation.
If the distension be occasioned by gas, on filling the abdomen, we obtain
a clear sound like that of a drum.

This abdominal pressure has been applied even to the investigation of dis-
cases of the chest.

Bichat suggested, that since distension of the stomach augmented the
difficulty of respiration in aneurism, in hydrothorax and hydropericardia,
&c., the elevation of the diaphragm by rapid pressure upon the abdominal
parietes, from below upward should afford some information important in
the diagnosis of thoracic diseases. He observed that, in pneumonia, this
pressure produced involuntary cough and a sense of suffocation; that in
pleurisy on the contrary, none of these phenomena were produced. In
effusion within the chest, he observed the same kind of difficult respiration,
the same suffocation, the same cough.

In hydropericardia, a disease so difficult to recognize, he asserts that this
pressure determines suffocation, sudden palpitations, irregularity of the
pulse, and sometimes dangerous syncope; that in aneurism of the heart,
all the distressing symptoms are aggravated. At the present day, our
means of exploration being so singularly perfected, this one indicated by
Bichat is generally abandoned; we should still have recourse to it under
some circumstances.

When the local symptoms occupy the mouth and the pharynx, we place
the patient before a window, or direct a strong artificial light into the throat,
and there are cases where we should introduce the finger into this part,
either to search for foreign bodies, or to examine the orifice of the larynx,
which in some affections is tumefied.

In examinations of the uterus, and even of the rectum, we employ the
speculum, which is made of various forms—those which gradually dilate are
preferable, as they are easily introduced, and without pain.

There are some circumstances which render this examination of the pa-
ient difficult. In infancy, for example, it is frequently very difficult to arrive
at a knowledge of existing disease. The organs of relation being as yet
undeveloped, we are deprived of much information, which at other stages
of life the patient himself may give us. Moreover, the sensibility being
excessive at this period, the sympathetic phenomena of disease are very prominent, and are frequently confounded in an inextricable manner with the idiopathic symptoms. In the decline of life, opposite causes produce alike obscurity. The wearing out of the brain having singularly altered those properties that have been called vital, an organ may be altered, even extensively, and the patient have no consciousness of it. This insensibility prevents his complaints, and at death we frequently find the most extensive disorders, without ever having suspected their existence during life:—it is the age of latent diseases. This defective sensibility is the reason why the sympathetic actions are so few and obscure, so that these general symptoms of reaction, which in other periods of life lead us to the knowledge of the disease which produces them, or which at least indicate that the patient is diseased, in old age do not furnish aid towards a diagnosis. We are confined in such cases to slight alterations in the functions.

This difficulty of examining the patient is still further increased, if he has not the use of his intellectual faculties. Complete deafness also is a great obstacle; and if blindness be added, we can rarely obtain any information from the patient; difference of language is a further obstacle to this interrogation, &c.

There are still other obstacles which render diagnosis difficult. When an organ is very deep-seated; and especially if its functions are but little understood, we can with difficulty understand its diseases. If the same region enclose many organs; if the sympathetic phenomena are very numerous; if the disease be latent; if there are many concurrent diseases—all these circumstances are opposed to certain diagnosis.

Many circumstances may induce an individual to feign disease; as the wish to attract pity and secure alms,—to avoid some of the duties which society imposes upon him—to avoid the penalties of his crimes,—to prolong his residence in hospital, &c. &c. Diseases may thus be feigned in two ways—either by representing symptoms, which really do not exist, or by exciting a disease, which previously did not exist: in the last case, the fraud is most difficult to be detected. The sagacious physician possesses many resources for discovering such imposture: after being assured of the possibility of simulating the disease, which he observes, and of the facility with which it can be done, he will enquire if there be sufficiently strong inducements on the part of the patient, to prompt him to such imposture. He will not neglect to note the degree of intelligence of his patient. He will examine if the age, the sex, the exterior state of the body, the constitution, the mode of life accord with the disease; but judicious interrogation of the patients is the best means of detecting the truth. We should propose insidious questions—inquire if he experience symptoms not at all connected with his disease; we will seldom fail to find him mentioning symptoms that are contradictory, and contradicting his previous statements; we should cause the patient to revert to the causes of his disease, to preceding circumstances, to the effect of remedies he may have employed. We should in such cases, accomplish a most exact and rigorous investigation. It is of the greatest importance to examine those functions not submitted to the influence of the will: in those diseases which exert an influence upon the circulation, (and there are few that do not,) the state of the pulse will greatly aid us in detecting imposture.

If all these means are not sufficient, we may have recourse to painful remedies, to a severe diet, sinapisms, caustics, blisters, moxa, &c., or to the protracted use of disgusting remedies, &c.

On the other hand, feelings of self love, of shame or of pride, induce patients to conceal their suffering. In our Hospitals the desire for food is the most common cause of this kind of dissimulation. In private practice this dissimulation leads to many errors; indeed, it is almost impossible to discover a disease, which is concealed from us; but not so in the hospitals
Where the patients are subjected so thoroughly and without reserve to examination.

When a patient presents one or more of these obstacles to an examination, the physician is reduced to the simple application of his senses. In such cases, the reports of persons about the patient are of much greater importance than under ordinary circumstances, because the only information we can receive. If the patient be not blind, we may still derive some aid from signs and gestures; a gesture imitating the act of vomiting will generally make him comprehend that we would know, if he have a disposition to vomit, &c. The sense of sight will inform us of the external habit and diseases; the touch, of the temperature, consistence, and degree of sensibility of the superficial and even of deep seated parts, of the state of the circulation, &c. The ear, of all those sounds discoverable by percussion and auscultation.

Let us take an example:—An individual is presented in a state of complete unconsciousness—so that from him we can obtain no information. We can learn only from those about him, that he enjoyed a state of perfect health, and that this accident has suddenly supervened. We resort then to our senses and our reason. We discover him to be about sixty years of age, of a strong constitution, that his cavities are large and his limbs well developed, that his face is red and flushed—his eyes prominent; the temporal and carotid arteries beating violently—that the lips are protruded at eachexpiration, that the saliva is frothy, the extremities are cold; one side of the body immovable, the pulse is strong and hard; that the patient has vomited and has involuntary dejections, that the respiration is laborious and stertorous. Do not we see here at once, the seat, nature, and extent of the disease, and the therapeutic indications it presents?

Let us examine:—There is complete unconsciousness. What diseases produce this? They are those of the heart, the lungs and the brain. Is it the heart, in this case? No, for he was previously well and the pulse is now regular. Is it not syncope? No, for the pulse is strong and the face flushed. Is it asphyxia? No, for the respiration and circulation still continue, and he has not been exposed to any of its causes. The disease must then be in the brain. But the diseases of this organ are numerous. It evidently is not chronic; and in coming to that decision, we throw out of sight one half of the cerebral diseases. It remains therefore to be determined, whether it be cerebral congestion, arachnitis, ramollissement, or hemorrhage. It is not cerebral congestion, for that is a general affection, and in this instance there are local symptoms. For the same reason it cannot be arachnitis; and moreover, it wants the regular course of an inflammation in the membranes. It can only be then either ramollissement or effusion. But ramollissement producing hemiplegia proceeds slowly, here the accident has occurred suddenly. Hemorrhage alone is thus instaneously developed. It then is a cerebral hemorrhage or apoplexy.—Let us determine its nature, &c. with still more precision. As the hemiplegia is of the left side, the hemorrhage must be in the right lobe. The hemiplegia is complete, therefore the hemorrhage is general over the lobe. Thus by the application of our senses alone, and our reasoning, we have arrived at a knowledge of the nature, seat and extent of the disease before us, and that with almost mathematical certainty. What more could we have obtained from the report of the patient himself? Now we may deduce the indications of the treatment from our diagnosis, the strength of the subject, the development of the pulse, &c. Is it not wonderful and truly consolatory to humanity, that we can attain to a degree of certainty so great, simply by means of our senses and reason!

After this examination, it remains to advert to antecedent circumstances which may have acted as causes, or which may furnish some data for the treatment. We should inquire to what cause the patient attributes his disease—if it be hereditary or acquired—if it had ever attacked him before, and if
so, what remedies were used and their effects. In a word, we should give our attention to the age, sex, constitution, idiosyncrasy, habits and profession of the patient. This constitutes what is called the commemorative examination.

Diseases do not present the same aspect at all periods of the day—we must therefore examine the patient, both in the morning and evening, and even in the middle of the day. It is almost unnecessary to remark that this kind of rigid examination must be maintained throughout the whole course of the disease.

If the case terminate fatally, the duty of the philosophical physician is not yet finished. Behold the moment that nature stands ready to test the judgment of the physician—to give the formal denial to his diagnosis if he were mistaken, or openly to confirm it if true.

The ignorant and those wedded to systems equally dread this proof; the first because it exposes their mistakes—the others because nature uncom- plaisant does not minister to their vain systems, but overthrows them—hon- est men most heartily seek for it, because it so sheds the light of truth and certainty upon medical observations. Of what consequence to the man enthusiastically devoted to his profession, and to the happiness of his fellow men, if he should be mistaken! Is he a man and may he not err! It will be but a satisfaction to the philosophic mind, to have found the means of re- cognizing his error and of rectifying it, and of avoiding it in similar cases—to have established incontestably the value of a diagnostic sign, to have glanced even at the possibility of introducing certainty into the practice of medicine, and thus elevate this beautiful science above all other human sciences—and these are the results which may attend upon such examination of the dead body. We say it in the face of the bitter raillery of the mediocrity, that there is no certainty, but after such examination; that the observation of a case is not complete until it has received the seal of this test.

This examination of the dead body requires the same care as the previous examination of the patient—nay, it should be more scrupulously executed, for the organs once destroyed before making our observations upon them, cannot be again subjected to our notice.

In France our very abundant resources for this kind of instruction, lead us to estimate lightly the immense advantages of post mortem examinations. We make them with indifference, and fail to derive from them all the in- structions they present to us. With what eagerness and minute attention do we see strangers, deprived of these precious resources, prosecute these investigations! nothing escapes their observation. Had Morgagni such a variety of subjects at his command? No, and yet how much instruction did he draw from those he had; he overlooked no organ, but examined all, and accordingly, what a valuable collection of facts has he left us! But when we have inspected the diseased organ, and given a passing glance at the neighbouring organs, we leave the case, satisfied with such an ex- amination.

If it be of importance to commence the examination of the patient’s ex- ternal state, it is of still greater to observe this precept in the autopsic examination. The size, form, color, temperature, consistence, and often the position of the body should be exactly noted. The expression of the face, the wounds, contusions, ligatures, ecchymoses, the excoriations, &c. even the accessory circumstances of the clothing, &c. should not be neglected in a case of medical jurisprudence.

M. Chomel advises to commence this examination at the abdomen. For where this cavity contains fluids, we can easily then appreciate their quantity and quality; and if the chest contain fluids also, we can judge of their quantity by the degree of protrusion of the diaphragm into the cavity of the abdomen. The examination of this cavity being completed, we can easily evacuate any fluid it may contain. If on the contrary, we begin with the chest, any liquid it may contain are sure to flow into the abdomen by the opening necessarily made into
this last cavity, and there is difficulty in appreciating its character. There exists, during a great part of the year an inconvenience, which induces us to neglect this precept and to commence the examination with the head. The examination of the brain when carefully made requires much time; now, if we commence with the abdomen and thorax, during all this protracted examination of the brain, we are inhaling the odour from these splanchnic cavities—not merely disagreeable but sometimes dangerous.

All persons most devoted to these examinations feel the want of some convenient instrument for opening the cranium, all being more or less defective, they all injure or tear the brain or its membranes, and thus expose to view alterations which did not exist, or destroy those which were present.

M. Amussat, (who has introduced many improvements into Surgery, which have been unjustly contested,) struck with these inconveniences, invented for this purpose a saw, on one side of which is a stop or set, which prevents the teeth penetrating into the interior of the cranium:—it does not answer the purpose well, because the thickness of the cranium varies at different points of its circumference, and especially in different subjects. But we still employ, in preference, a kind of hatchet—a hammer with an obtuse cutting edge, proper for breaking the bones. The skull cap being removed, by a circular cut through the integuments, and by sawing or breaking the bones and tearing from the dura mater, we may then observe particularly the state of this membrane; we then make an incision into it at the distance of a half-inch from the longitudinal sinus, and carry this incision parallel to the sinus, from the crista galli to the tentorium on each side; we afterwards detach the falx this isolated, by cutting upon the crista galli; we separate the dura mater from the sides, and expose the encephalon still covered with the arachnoid and the pia matter; we examine these membranes; we expose the cerebral convolutions; their colour, form, size, consistence, their degree of moisture or dryness should fix our attention. After this, we cut off by very thin layers, the whole of the cerebral mass, and examine each of these parts with great care and note their physical characters. We thus penetrate cautiously into each of the ventricles.

The brain being examined, the cerebellum demands the same degree of attention. We detach the tentorium which covers it, we cut the spinal marrow as low as possible and remove it. The spinal marrow should occupy our attention last in the examination.

To inspect the thoracic and abdominal viscera, we remove the anterior wall of the abdomen, by an incision nearly circular, commencing at the hypochondrium descending upon the os ilium, following the course of this bone towards the pubis, and ascen—
We mark the exterior of the lungs—their colour, consistency, form—in a word, all their physical properties. We regard attentively the pleuræ, the fluids they may contain, &c. after which we cut into the lungs, then into the trachea, the bronchii, and the larynx. We then pass to the examination of the heart and its envelopes; after observing its exterior, we cut into its cavities to observe the thickness of its sides. We examine all its orifices; we enquire if any impediments to the circulation exist, and what is their nature: with equal care we examine the auricles, and thence open the aorta through its whole extent in the chest;—this operation is generally neglected for the veins, but we cannot too strenuously urge it. We then pass to the genito-urinary systems. Having satisfied ourselves as to their external state, we should open the alimentary canal from the pharynx to the rectum, by means of the enterotome of M. J. Cloquet. In some cases we should carefully preserve the contained liquids. We should then regard the size, colour, consistency, position, &c. of each and every organ in the abdominal and pelvic cavities, and we should not neglect the examination of the organs of circulation in the abdomen, which may not have been examined.

We then turn the subject upon its face for the examination of the spinal marrow. We raise with ease the teguments and large mass of sacro-lumbar and dorsal muscles: we then lay bare those portions of the vertebrae forming the posterior wall of the spinal canal, and by means of the rachitome, an ingenious instrument of M. Amassat, we divide these portions without interfering with the spinal marrow; thus removing all the spinous processes, we bring into view the marrow still enveloped in its membranes; we observe these, cut into them, and remove them for the examination of the vertebral pulp itself. There are cases in which the limbs should be examined, as also the muscles, the bones, the articulations, the vessels and the nerves. It should always be done.

The method of performing this examination is of little consequence, provided we neglect no organ, but examine them all, and particularly that we do not ourselves produce accidental lesions, and then mistake them for pathological developments.

Whenever we do encounter any morbid alteration, we should regard it with the strictest attention, and not abandon until we have a perfect apprehension of it.

A physician should not confine himself to the interrogation of a patient in order to obtain information to direct him in the particular case; he should record his observation, either for the purpose of preserving simple notes of interesting facts, or for digesting a memoir for his future use, or for publishing his observations for the benefit of the science, &c. The young physician, unaccustomed to this exercise, must necessarily experience much embarrassment, particularly as the masters of the science have merely left us models, without accompanying them with precepts. The art of describing a case is a difficult one; it requires the possession of some very rare qualities. Independently of a profound knowledge of his profession, which depends upon himself, the physician should possess great sagacity, and the faculty of attention in a high degree, and should, moreover, be endowed with sensibility, taste, and even imagination. None will deny the necessity of sagacity and attention for the physician, but some may ask, why require that he possess imagination—that faculty which exaggerates and throws such an illusion around its objects? Because, a cold, unfeeling spectator of the ills of his fellow-creatures, may be a very exact and attentive observer;
but one endowed with sensibility—touched with the feeling of those evils, which affect not the other, will he not record them with a spirit that vivifies his description? Compare the colourless image of the first with the animated picture of the second! Whence the differing emotions with which we receive the descriptions of different physicians? Why is it that we read with indifference and ennui a history of a disease by one, and with the most lively interest that by another; but that the first is destitute of sensibility, taste, and imagination, for which qualities the other is remarkable? No doubt every advantage is on the side of the last in the description of their cases. Two pictures of the same object, by two different painters, will bear the impress of the genius of each—both may be just, but one may be a chef-d'œuvre, the other a work of mediocrity. In recording a case for his own instruction, the observer cannot be too particular; he should note the negative as well as the positive signs. We must then note the morbid state and the natural state of all the organs—of all the functions, and all the changes which supervene day by day and hour by hour. But although such a description be of value for the physician himself, will it not be tiresome and repulsive to the reader? As the object in recording a case for publication is to give as directly as possible, the most exact and just idea of the disease, in digesting a case he should commence by discarding all superfluous details, and should present to the reader the most striking features of the disease.

After a short commemoration as to the age, sex, constitution, profession, habits, state of the menstruation, (in females), the suspected cause of the disease, the antecedent affections, the exterior state of the body, the physician should present the symptoms furnished by the organ and the function disordered. Here we would ask—Is it not preferable to preserve the same order in the description of all cases? Will we not expose ourselves to confusion in commencing our description sometimes in one way and sometimes in another? Struck with the prospect of this inconvenience, I at first adopted this uniform method; but I found subsequently, that thus the general phenomena, of less importance, were frequently presented to the mind, and occupied that first degree of the attention of the reader which should have been spent upon the more important characteristic signs; and, therefore, as our object is to convey promptly a just and striking idea of the disease, we cannot too soon expose those symptoms which give it individuality. Of the two inconveniences, I have preferred the less, and adopt the method of presenting in the first instance the local, organic and functional phenomena, although it necessarily determines some repetition. Having presented the principal local symptoms, we should then pass immediately to the sympathetic phenomena—to those which the organs furnish, that are most intimately connected with those diseased, and successively to others more remotely associated. We should be succinct in our narration, taking equal care to omit nothing of importance, and to reject everything superfluous and unprofitable. When the disease terminates fatally, we should follow the same course in our researches upon the dead body—record every fact, positive and negative, for ourselves; but for the public, only what is interesting and profitable. We should note also, the succession of the symptoms day by day—the course, duration, and termination of the disease, and the results of the post-mortem examination.

We should always commence the examination of the patient, and the description of the disease, at the organ and function diseased or attacked; if many organs be diseased, we commence with the one most seriously affected.

The following table will be found useful in guiding our interrogation of the patient, and recording the history of his disease. It is scarcely necessary to say, that we will seldom or never be obliged in any one case to propose as many questions as are here suggested.

[The table alluded to above will be given in our next.]

I do not remember to have seen any reference made, (medicinally) to the Ceanothus Americanus of Linnaeus. Its sensible properties led me to use it in a case of aphthae, and subsequently in other derangements of mucous surfaces, where I found it of some importance. Professor Bigelow describes the Ceanothus as follows: "Leaves heart ovate, acuminate, triply nerved. Panicles axillary elongated. A small white flowering shrub, not unfrequent in dry sandy soils. Leaves two or three inches long and one broad, finely serrate, and tapering into a long point. From the axils of the upper leaves come out leafless branches bearing crowded bunches of minute white flowers. These are followed by dry three seeded, and somewhat triangular berries. The leaves were used, among other substitutes for tea during the American revolution." I might add that the dried leaves and seeds have an odour, when bottled, not unlike the imported tea. It has a slight bitter, and somewhat astringent taste. I first used it in a case of an old lady of seventy, who had a severe thrush following typhus. The usual gargles were tried without much effect. Every second or third day a new coat of darker hue would cover the whole interior of the fauces. The mucous membrane after its discharge presented a dark florid appearance, with extreme sensibility. I had tried borax, alum, nitras argenti, vegetable astringents and tonics, as gold thread, crane's bill, hardhack, oak bark, sumach, &c. without much benefit. The Ceanothus growing near, I directed a strong tea to be made of it, which acted like a charm; the thrush soon passed off, and without relapse. Since then I have used it largely in aphthae of children, and find it highly useful in cases following dysentery maligna, as well as those of less debility and disease, even after other gargles have been ineffectually tried. During last March and April, scarlatina, attended in most cases with ulceration of the fauces, was very prevalent with us; I depended almost exclusively upon the Ceanothus, with borax for a gargle, and in all but a single case of very malignant character, this gargle was effectual. The form I used, and which I found best adapted for the cases as presented, was prepared by making a strong tea of the Ceanothus, and flowers of the Anthemis Cotula, and to a gill add a piece of borax the size of a large pea. I think the borax and Mayweed rendered it in many cases more effectual. I have also used it with benefit in form of a tea in dysentery of children, and found it fully equal in many cases to the Spirea tomentosa. The tea I used was prepared from the leaves and seeds.—Boston Med. and Sur. Journ. Sept. 30th, 1835.

We are pleased to see such articles as the above, brought before the public by industrious and faithful observers—articles with which our country abounds; and as valuable as, not to say more so, in many instances, than those which are imported at great cost and trouble.

Distance and cost seeming to place a peculiar value on others of their kind, whereby we are often decoyed into a preference for them; the bounties of Providence by which we are surrounded are but too often contemned or disregarded.

The Ceanothus Americanus is one of the most abundant of the small shrubs found on our dry sandy soils. In this section of the country it is known to all the country people by the common names, Red Root, Red Shank, &c.; and were its virtues
well known amongst practitioners, it is sufficiently abundant to be made an article of commerce, of comfortable profit to its preservers.

In situations remote from medical aid, and, indeed, in most families in the country, it is in constant successful use as a styptic and astringent. The observations of many years enable us to confirm the remarks of Dr. Hubbard relative to its virtues in aphtous affections.

In thrush in children, it is itself a remedy not inferior to borax, which has been so long in universal use. In those cases of Fluor Albus which are attended with aphtous eruptions, it has been found as uniformly profitable as any remedy of its kind of power; and as generally corrective, as abiding and still operating causes of this eruption would allow. In those cases of Fluor Albus which depend on prolapsus, or descent of the womb into the vagina, which constitute no small proportion, there is probably not a better astringent lotion in use than its stronger preparations, for permanently correcting that relaxation of the vagina which exists in these cases.

In obstinate diarrhoea, the bark of the root has been long in successful use. In the troublesome discharge and ulcerations of the second stage of salivation, it has been long and successfully administered. The strong decoction of the bark of the root, also the bark of the fresh root itself, have been found by experience amongst the most valuable styptics in domestic use, for restraining haemorrhage from wounds. A tea of the leaves and flowers, sweetened with fine sugar, &c. which is not an unacceptable offering to the palate and stomach, is finely adapted to diarrhoea and relaxation of the bowels generally, particularly in children, and those troublesome habitual cases unattended with febrile action, in which we have reason to apprehend the presence of apthae, or ulceration, in the mucous membrane of the intestines.

It has also been found useful in those highly dangerous cases of hypercatharsis induced by the ruinous power of Lobelia in the hands of the Thomsonians, and which so often ends in permanent relaxation of bowels and loss of all powers of nutrition, and consequent death.

In such cases, a tea of the leaves and flowers may be very advantageously prescribed, more or less exclusively as a diet. This tea will generally be found not only admissible, but remedial in those cases of dyspepsia in which the bowels are perpetually relaxed, and the digestive and nutritive functions suspended.
Morbid effects of Intemperance. Extract from Dr. Hodgkins' Lectures on the means of promoting and preserving Health.

This work has been lately published in London, and to use the words of the British and Foreign Medical Review, is "literally full of information." We are indebted to the second No. of this new work, April, 1836, edited by Drs. Forbes and Conolly, for the following valuable extract. Dr. Hodgkins is well and advantageously known in England as a Pathologist, and is therefore known to speak the language of the truths of observation. He is not here advocating the cause of the "Temperance Reformation," but pouring forth the stores of his observation and judgment directly for the promotion and preservation of health—the noblest effort of the medical man.

His second lecture contains a great variety of information concerning the different kinds of food and drink. The destructive effects of spirit-drinking are forcibly dwelt upon, without exaggeration, and the following remarks will interest the medical reader.

"The fatal influence of intemperance in drink, is occasionally seen a little beyond the middle period of life, at which time persons are not very frequently subject to what is called climacteric decline. Some are favoured to recover from its attack; but to the spirit-drinker it almost always proves fatal. Premature old age is another result of spirit-drinking. I have often noticed, with surprise, in the course of my practice, that when I had suspicion of the habits of a patient, and have enquired his age, that with all the marks of age and decrepitude upon him, he was some years my junior. The habit of spirit-drinking unfits its victims to bear the wounds, fractures and accidents of various kinds to which all are liable; and the skill of the surgeon is often baffled, or foiled, by the ill condition of his patient, which, by a long course of spirit-drinking, has destroyed the powers of his constitution. It is also worthy of remark, that the spirit-drinker is peculiarly susceptible of disease of all kinds, and, consequently, is likely to fall the first victim to fevers, or other epidemic distempers. The ravages of the cholera have confirmed this by unnumbered proofs.

"The heart and blood-vessels do not escape the injurious effects of ardent spirits. The former is subjected to great varieties of excitement, and the palpitations so produced may lead the way to permanent disease. Ossification of the valves, and thickening of the lining membrane, are the probable results. The arteries, both large and small, are very liable to become ossified; and when this effect is produced, the individual is very liable to apoplexy and gangrene. In a former part of this lecture, I have hinted at the injurious effects which improper drinks may produce on the lungs. There is, perhaps, no error of this kind by which this effect is so strikingly produced as when ardent spirits are taken. Besides the obvious effect which they must have in promoting and aggravating inflammation of the lungs, whenever these parts suffer from irritation, at a time when the system is under the influence of spirits, there are two other modes in which mischief is produced, affecting these organs, which are less obvious. First, it has been ascertained by experiment, that a greater exercise of respiration is required when the system is excited by spirit; hence, divers cannot remain
so long under water after they have been taking spirits, as they can at other times. Runners, also, find their wind shortened after drinking spirits. Now those who take spirits in sufficient quantity to affect the system, and then, under the excitement which they have produced, apply themselves to some laborious or active exertion, must expose the lungs, or organs of respiration, to the chance of very serious injury. The other effect to which I allude, may seem at first to be at variance with what I have just related, as well as opposed to the vulgar or common opinion respecting the effect of spirits. It is generally supposed that they promote the warmth of the body: on which account they are frequently taken by persons who have no inclination to intemperance, when they are peculiarly exposed to cold. This is a very fallacious practice. A transient glow may indeed be produced by the quickened circulation which for a short time succeeds the swallowing of the dram; but this afterwards becomes proportionally more languid: in consequence of which the surface, and more especially the extremities, become pale and cold, whilst the internal parts are both stimulated by the spirit, and loaded with the blood which has left the surface of the body. The object of maintaining and equalizing the warmth of the body is completely lost; whilst the internal organs are exposed to the danger of inflammation. This effect of ardent spirits is seen carried to its greatest and most dangerous extent in Russia, and other countries where extreme cold prevails. The inhabitants of these countries are apt to give way to the temptation to take spirits to an amount which produces overpowering intoxication. If, in this state, they expose themselves to the cold air, or are driven out of dram-shops and turned into it, the combined influence of the benumbing cold, and the liquor they have taken, produces a profound degree of torpor. Breathing, which is closely and necessarily connected with the production of animal heat, is almost suspended, and the individual, unless rescued from his dangerous situation, is soon frozen to death.

"The deleterious effect of spirit on the skin, is seen in the production of what are usually called grog-blossoms. Spirits, likewise, promote attacks of erysipelas, which are often severe, and even fatal, in persons whose constitutions are shattered by the use of spirits.

"The worst effects of spirits, as connected with bodily health, are those which it produces upon the nervous system; by which, I mean the brain and nerves. The first effect of a large dose of spirits on this system, is almost immediate, and quite notorious, causing swimming of the head, confusion of ideas, and staggering gait. The late Dr. Spurzheim, who is almost universally known, in consequence of the long continued and close attention which he paid to the brain, declared that he had found brains peculiarly hard in this country, which he attributed to the general abuse of spirits. A striking, and often immediate, effect of intoxication, upon the brain, is apoplexy. When this is not immediately fatal, palsy is almost sure to remain. Epilepsy is another very serious disease of the brain, which, when not produced, may be greatly aggravated, by the influence of spirits. In females, they greatly promote a tendency to hysterics. One of the most serious diseases of the brain, brought on by the use of spirits, is called delirium tremens. Persons, whose age might induce one to suppose that they were in the prime of life, are sometimes carried off in a few hours by this dreadful malady. Those are the most liable to die from this affection, who have kept up an almost incessant state of excitement by means of ardent spirits. It is not necessary that the quantity taken should have been such as to produce an extreme degree of intoxication. The individual may even have been able, in some degree, to attend to the various concerns in which he might happen to be placed; when, after the sudden removal of the stimulus, or the abstraction of blood; or some powerful influence on the mind, or sometimes without any assignable cause, a state approaching to madness, and often marked with tremors, muttering, and prostration of strength, suddenly comes on, and if not pretty promptly relieved by well-directed medical aid, is very apt to prove speedily fatal."
PART III.—MONTHLY PERISCOPE.

Medical Application of Galvanism.

We learn by the Boston Medical and Surgical Journal of 29th June, that Dr. Page, of Salem, has lately contrived a modification of Professor Henry's apparatus for obtaining sparks and shocks from the Calorimter, which, he thinks, must supersede all other instruments at present in use for the application of galvanism in cases of paresis, &c. He does not give a particular description of the apparatus, but merely announces it, on account of the interest it promises to the profession. By a self-regulating apparatus, the shocks may be made to succeed each other with almost any degree of rapidity and strength. The sensation thus produced, he says, is quite unlike, and less disagreeable than that from the deflagrator. He believes that it will also undoubtedly prove a superior instrument for the application of M. Palabrat's discovery for the transmission of medicinal substances through any part of the body, by galvanism.

We look with pleasure to the day when galvanism will become one of the most important and agreeable agents at the command of the practitioner for the regulation of excitement, especially local excesses and deficiencies. We have witnessed for many years its decided power of lessening action at one pole and increasing it at the other—thus proving its power of translation or revulsion. So decided is this power, that when properly adjusted to two blistered or denuded points, the blister at one pole will desiccate, whilst the other will inflame and secrete copiously; and in some cases, finally sphacelate. In view of this fact, the Medical Society of Augusta, at a recent session, offered a premium of fifty dollars for an apparatus for the convenient application of galvanism to the purpose of revulsion in the treatment of disease. We can form no distinct idea of the apparatus of Dr. Page, as he has given us no description. We trust, however, that the article itself, or a competent description of it, will soon be forthcoming, and, for the credit of the profession, unimcumbered by the price of a patent right; or, should the right of use be restricted by a patent, that the privilege will not be offered at such a price as will amount to a prohibition of its use in the service of humanity. Such is the case with regard to several new inventions recently and at present offered to the public—amongst which we will name trusses, galvanic apparatus for medical purposes, &c. &c. many of which are put at from five to fifty times the value of the article from the hands of the makers. This we look on as an outrageous
abuse of patent protection, the object of which is mainly to hold
out an inducement to genius and industry, that divers good pur-
poses may be answered, as saving of labour, economy in the
expenditure of money, accomplishing new and important pur-
poses, &c. But there is an avaricious disposition in most men
which will make them reach just as deep into the pockets of
others as any device can enable them to do; and we regret that
there are instances to be found in the profession of medicine,
where charity and benevolence should characterize every move-
ment and purpose. O! it is one of the most nauseating drugs
in all the routine of operations of medical men—it operates by
the ears, and sickens the heart, to hear a medical man say, (and
we have more than once heard such,) "they will not hesitate to
give any price, when pain afflicts or death threatens," or "I
must put the price thus high, that I may be able to give to the
poor who cannot buy," and still the poor who are thus supplied,
are never to be seen or never heard of—thus contending for
such prices as ten, fifteen, twenty, thirty, or perhaps one hun-
dred dollars for an article, the manufacture of which is only
worth from fifty cents to two or three dollars. Thus are the
very purposes for which patents were created, subverted.
The invention, suppose it the least in the world, is put beyond
the reach of all prudent and economical persons; or they are
forced by torture or danger to squander their fortune in search
of relief, and become tributary to the insatiable avarice of some
inventor, and perhaps impostor. Thus does state protection,
instead of securing to the good citizens the benefits of improve-
ments and discoveries, actually debar the benefits for fourteen
years, and protect the insatiable avarice of the patentee, even
notwithstanding the same discovery may have been made by
others. These remarks are applicable to the principle of patents
generally. But what shall we say of patents for the exclusive
right of things demanded in the service of humanity, used for
purposes of rankest extortion? If life depend on the use of the
article, and the high price debar the use, (because it is unlawful
for any other than the patentee to vend or use, without satisfy-
ing the patentee,) then the patentee becomes the cause of death,
and the state the protector of his inhuman and criminal avarice.

It is a glorious truth, that such examples are rare in the pro-
fession, and never to be found with those highminded and honor-
able members who are properly classed in it. It is only a few
of the sordid and mercenary, who would sell alcohol by the half
gill, or spread the smallpox virus, if they could make money by it.
"The virtue that needs guarding is not worth keeping." The
truly benevolent cannot limit their usefulness in the cause of
humanity, by sheltering their own individual interest, against the
general weal.

We would suggest this improvement or amendment of the
patent law: that in all instances the patentee be compelled to
forfeit his right, on being convicted of selling or offering his inventions at more than double the price at which they are manufactured; or of pricing his right of use at more than the price at which the article can be procured of the manufacturer. This would afford an inducement as effectual in promoting industry and the exercise of genius as the present, without legalizing cruel and inhuman privations on one hand, or feeding an insatiable and misanthropic avarice on the other. It is to be hoped that it will not be long before those patents which are for useful articles will be superceded by improvements on the present patents, (a thing almost always easily done,) and the benefits then taken into the hands of professional men of sound and honorable principle.

Extract of Belladonna preventive of Scarlatina.—Apart from Homaeopatheia, the German physicians continue with increasing confidence to look to the use of Belladonna for the prevention of Scarlatina. They use it in the form of a solution of two grs. of the extract to the ounce of water. Professor Fleischmann has recently used it in fifty-two children, during the prevalence of Scarlatina for about five weeks. Forty-eight of these escaped the disease. It was given in doses of one drop for each year of the age of the child in all cases; and even in this small dose, (which, however, seems Homaeopathic,) the symptoms of the action of Belladonna were observable in twenty-three cases. It is believed by the professor to counteract the contagion,* diminish the susceptibility without entirely removing it; and give a mild character to the cases which do occur notwithstanding its use.

We regret that Professor F, did not state what proportion of the children who did not use this prophylactic, suffered by the disease; for without this, the testimonial in favour of the prophylactic virtues of Belladonna is nugatory. When a few hundred cases of fever occur in a community of many thousands, they strike the attention with great force. But the thousands who escape are not thought of. A practitioner in full business may lose half a dozen patients; another of small business may lose one or two. The latter plumes himself on his success, in having lost but one or two cases, whilst the former has lost several times that number;—the positive number lost in each case is only thought of, not the relative proportion; and the latter is exalted in the community for his signal success, and the former proclaimed “very unfortunate;” whilst the relative ill success was

* The existence of this kind of extrinsic cause is yet a subject of much doubt.
with the former, as one to a hundred; and that of the latter, as one to four or five. Thus it is, that improper estimates are often and most unintentionally formed. We apprehend that it is not a very easy matter to form a correct estimate of any active preventive means. Certainly it is preventive, to withhold "causa noxia." There are also within our knowledge noxious causes which are susceptible of chemical correction, whereby their active powers are neutralized and destroyed. We know also of the preventive value of avoiding predisposing and exciting causes; and the great science of Hygiene consists mainly in the knowledge of noxious causes; and the practice of it in avoiding them. It is, therefore, in a certain sense, rather a passive than an active science. But here, causes, and their modes of acting, are known, and their application generally avoidable; and most commonly indeed, require voluntary effort to secure their application. The case is very different with regard to Scarlatina. Even the fact of its contagiousness is by no means satisfactorily determined. And certain it is, that if it depend upon contagion for its cause, that contagion has laws entirely different from the generally admitted laws of contagion; or it has no laws at all; and if it has no laws, or peculiar characteristics in its mode of action, it has no qualities at all; for it is only by the effects that we have any knowledge of contagion whatever; and therefore there is no such thing. If, however, it depend on a contagion with peculiar laws, these laws are not known. There is therefore no knowledge of the cause, and without some knowledge of the cause, no active means can be directed to prevention on rational, or other than merely imaginary grounds. In such a case, it is only accident, or unguided experiment, which could be expected to develope the fact of a preventive power in such a case. When done, the truth depends, for its reception, on the strength of the evidence of the fact. If, therefore, professor Fleischman had made it appear that a considerably greater proportion than eight out of one hundred children, under precisely the same circumstances in all respects, except the use of the Belladonna, took the disease, and this, in repeated experiments alike fairly made, then, and not until then, could we have consented even to coincidence, much less to cause and effect in the premises. We believe in the possibility of preventive or ameliorating means for this disease; but we believe they are not likely to be revealed until the view of the disease is extended to a plurality of causes—the want of which generally, we look to as one of the greatest errors in pathological reasoning. Certainly there are few, if any, effects without more causes than one, and this doctrine is as applicable to pathological as to any other phenomena. If, therefore, preventive as well as curative indications do not embrace a proper relation to all the causation in the case, they must be essentially and radically
defective; as causes must be withheld if effects are to be prevented; and removed for their correction, if these have been produced.

Animal Magnetism.—M. Poyen, lecturer on Animal Magnetism in Boston, has lately translated the report of the Magnetic experiments made by the commission of the Royal Academy of Medicine of Paris, read in the meeting of 28th June, 1831, by M. Husson, the reporter. He has preceded the translation with seventy-one pages of introduction, or prefatory remarks, which are said to add great interest to the work. The whole taken together, forming a duodecimo volume, published by D. K. Hitchcock, is said to comprise the whole of the present state of knowledge on this curious subject.

It is not a little strange, that those very respectable physicians, at the head of the profession, who have from time to time observed the operations of magnetizers, and the phenomena which are declared to have followed these operations, should not long since have determined the fact of the truth or falsehood of the matter. It does appear to us that there is something of scientific cowardice, (if we may so speak,) prevalent in relation to this avowed power. How should Cloquet, for example, agree that the magnetizer should exert his powers in preparing a woman to have her breast amputated, without any pain which should make her sensible of the operation—then operate, without the least manifestation of pain, or consciousness on her part, of what was passing, and without knowing, after being de-magnetized, that the operation had been performed, until told of it—report these things to the Academy as incidents which he had witnessed, and not determine whether there was in it the operation of cause, and the production of effect, and give, at once, the whole weight of his character to prove that there was, or that there was not truth in the thing? It may be considered noble, to acknowledge before the Academy, (mainly a body of unbelievers in animal magnetism) the facts he witnessed, being himself an unbeliever. But this we cannot think, unless truth has become a most rare commodity; for it is the most common-place duty in science to tell the truth. Could it be said that Cloquet acted nobly because he did not tell a falsehood and deny the truths he had witnessed, or, that he did not conceal them, when he that would do either must be beneath all consideration? For this, he was entitled to about as much credit as the man would be who should borrow his friend's horse, and return him with acknowledgments of the favour, instead of stealing him and denying having seen him. Was M. Cloquet a complete Dr. Doughty? If so, he should have said to the Academy, “I seem
to have operated for the amputation of a female mamma, and
the woman seemed not to know when it was done. And it
seemed to me that the magnetizer offered to bring her into a
state of insensibility, preparatory for the operation," &c. "but
all things are doubtful—all things uncertain."

But we may come nearer home. Mons. Bugard, in Boston,
undertakes to so magnetize his pupil, a little girl twelve and a
half years old, as to prepare her to undergo the extraction of a
molar tooth, without the least pain. Dr. Ware extracts the
tooth—the girl does not feel it, and is only conscious of it by the
blood found in her mouth afterwards, and by the vacancy in its
place. Present, Professor Tradewell, of Harvard University,
and Drs. Harwood, Lewis, Hodge, &c. &c.—a long scene is
exhibited in which all play a part—and the whole is left to be
told by a medical student only. Where are the Doctors? Why
have they not ventured on this matter? Have they preferred
to have a man between them and the rope? Have they been
disposed to make the medical student the scape-goat? Or a
pioneer, to fall by the first shot—saving themselves? Or is
Mr. West the only man of the party who has the independence
to declare what he has witnessed?

If there be truth in this thing, (and if there is not, why do not
those whose names are connected with these phenomena,
promptly and effectually correct misstatements?) if there be
truth in the thing, we say, there is no necessity before we ac-
knowledge the truth of the power, that we understand the whole
minute philosophy of it. This unknown philosophy, remains a
subject of most interesting enquiry. We do not hesitate to own,
when we see the time indicated by the hands of a clock, that
the clock truly has the power of keeping and shewing the time,
although we may be ignorant of the precise mechanism whereby
this end is effected. When we see a man perform the various
functions of life, we believe in the existence of life, although we
may have no idea of the internal organization. We have ac-
knowledge the existence of life in all generations, and no man
has yet told us what it is; but we have owned its existence
because we have witnessed its effects. For our own part, we
regret to say that we have never witnessed the operations of
the magnetizers, but think we could scarcely fail to determine,
on doing so, whether there was or was not cause and effect,
even if we could not comprehend or detect the cause. Events
themselves declare cause, with most unequivocal certainty.
There is no phenomenon cognizable to man, through the medium
of his senses or otherwise, which he does not intuitively and at
once acknowledge as the effect of competent causation, however
it may be calculated to overwhelm his powers, by its grandeur,
or elude their search by its minuteness. Is the influence of one
man over another by the way of what are called magnetizing
operations, more incomprehensible than the elementary constituents of those microscopic animalculæ which are only brought to our perception by glasses which magnify a million times—their minute organization for locomotion, nutrition, sensation, &c.; or than the vastly incomprehensible universe? And can we extend even our imaginations to the contemplation of either, without at the same time acknowledging the cause of all? Our difficulty is not here. When we place a man of one or two hundred pounds on a table, and raise him on the points of the index fingers of four men, without a sense of more weight than a few ounces or pounds at most; or when, on thus raising him he leaves the fingers and ascends higher, we know at once that there is antecedent and sequent, and cannot hesitate to acknowledge it. But if a like sequent uniformly follow this antecedent, we are compelled by an unavoidable law in reasoning to acknowledge causation, and competent causation; for such is the obtuseness of the human intellect, (at least of ours,) that we can perceive or comprehend no more minute knowledge of cause and effect than that of their being different phenomena which uniformly occur in the same relative concatenation. This truth established, and there is no resting place for mind, short of determining the latter link consequential. But there is no effect without cause; therefore the existence of effect proves cause. Our doubts on this subject, then, only extend to the history of this concatenation; and are only founded in the difficulty, common to the human mind, of allowing that of which we have no distinct idea, or which differs entirely from any thing the mind may before have comprehended or contemplated; as of forms or powers not before presented to our senses or intellect. We hope to witness these things ourselves, or receive the high testimony of men at the head of science—then we shall feel no difficulty in venturing our faith on the unerring laws of rational argument.

Chloride of Soda for Sore Nipples.—Dr. Chapin, in a memoir in the Gazette Medicale de Paris, says, that of all the means recommended for the cure of sore nipples, nothing has so well succeeded in his hands, as frequently repeated lotions with Chloride of Soda. In one or two days, he says, it will often effect a cure.—Amer. Jour.
Morison’s Hygeian Pills.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—Seeing an account, in one of your late numbers, of the death of a patient from the use of Morison’s Hygeic Pills, I am induced to send you the following notice of them from “Colton’s Four Years in Great Britain.” From the closing observation it is not to be wondered at that numerous individuals have paid for their credulity with their lives. Is it not astonishing, that while the nations on the continent of Europe have suppressed by law the vending or advertising of such patent medicines, Great Britain and the United States, those two enlightened and liberal governments, should patronize them to an extent almost beyond human calculations? The auri sacra fames seems to be here predominant over life itself.

S. W. Williams.


“The celebrated empiric, Dr. Morison, pays to the government of Great Britain upwards of 7000 pounds ($33,600) a year, in the way of tax of three half pence on each pill box. His boxes are of two sizes; and retails one at a shilling, and the other at sixpence. Suppose he sells an equal number of boxes, which would make the average per box eight pence; allow for tax, materials and making of the pills, and discount for the trade four pence, the net profit to himself would then be £37,666, or $150,793 annually! The professional practice of Mr. Brodie, Saville Street, surgeon to the king, has been stated by creditable authority to be £15,000 or $42,000 a year. In reputation as a surgeon, Dr. Brodie is only second to Sir Astley Cooper. How much more profitable is empiricism than science and art, and some of the greatest fortunes in Europe have been made by the manufacture of blacking. What a quantity must have been sold in London, to afford an advertising bill for Warren’s blacking of £250,000, or 1,200,000 dollars, annually. Yet such is the fact.

“Sir John Long’s recipe was left sealed by him, price ten thousand pounds, not being opened before bought. It has been taken on the terms of his will—a pig in the poke.

“It has been ascertained that the careless and imperfect mixing of the ingredients of Morison’s pills, often leaves the powerful agents in one part of the mess, before it is made into pills, which kills those who happen to have a box of that portion—while the rest may be swallowed with as much impunity as so many bits of dough from the kneading trough.”

[In connection with the preceding from our correspondent, we beg leave to present the following remarks by Dr. Johnson, editor of the Medico-Chirurgical Review.]

Sparely a day passes without instances occurring of a serious mischief from the preposterous use or abuse of this quack medicine! These events, however, make but a very trifling and local impression on the few who become acquainted with the facts of the case. It is only when a judicial inquiry takes place, and the attention of the public is attracted to the subject, that much check is given to the suicidal consumption of the nostrum in question. We have good reason to believe that the manufacture of “Morison’s pills” has experienced a considerable diminution by the late inquest and trial at Manchester. We are disposed to think that a blow of no small force has, still more recently, been given to the preposterous manifestations of the Hygeist, by the inquest in Clarence Gardens.

There can be no doubt that this verdict was correct. Not that we suppose there is any ingredient in this nostrum of a poisonous nature; but that the venal recommendation to employ the pills in all diseases, leads to such an indiscriminate ingurgitation of them, that a certain per centage of death must be the inevitable result.
Here lies the great moral responsibility! What a self-immolated host of victims must greet the Hygeist on the banks of Styx, and deaf and old Charon himself, while waiting the afflicted ghost to the regions of Tartarus! Poor Mr. M'Kerrel narrowly escaped a verdict of Felo-de-se, for taking Prussic acid; and yet thousands of infatuated people, in this country, are not considered insane, although they swallow quack medicines which are certainly fatal as, though far more painful in operation than, Prussic Acid!

"Quem Deus vult perdere prius dementat."

The verdicts on such occasions, ought, strictly speaking, to be—"Suicide committed during temporary insanity respecting Morison's pills."—Boston Medical and Surgical Journal.

Thomsonian Practice.—"A correspondent in Connecticut gives us the following particulars of a case which recently came under his notice.

Miss E. Fox, aged about 30, had been subject to slight epileptic fits for about two years, occurring irregularly, sometimes as often as once a month, and sometimes not oftener than once in two or three months. She was importuned to take the advice of a Thomsonian in Hartford, and had been under his care about a week, when she died, immediately or very soon after coming out of the hot bath. Mr. Fox, her father, informs me that he saw her on the day before her death, and that she expressed a wish to return home, but concluded to stay and be cured, and that he could not learn the particulars of her death, but the doctor said the fits killed her, for on coming out of the bath she had six or seven in succession, till she died. It is reported also, that after the bath she had the cold dash and the lobelia emetic, and that she died in the operation of the latter. I believe she had never persevered in a judicious course of medicine, though she had been very much benefited last winter by taking stramonium seeds, recommended by a person not a physician. She however took them in such large doses as soon to cause confused vision, and they were consequently discontinued; but the fact itself of the improvement shows that she might very easily have been cured under proper treatment. One of the many soi-disant philanthropists of the present day, who had had the Thomsonian practice in his family, and who was busy in recommending it to others, once told me—what he seemed to believe—that the Thomsonians could give a man an emetic immediately after he had eaten a hearty dinner of beef-steak, and that the emetic would clear out all the bile from the very bottom of the stomach, and yet the beef-steak should remain unmolested. 'This man was not a fool, but knew enough to get a living in the town of East Windsor, Conn. Such people seem to have for their motto, "Credo quia impossibile est.'—ib.

Illustrations of Surgery.—A splendid set of Illustrations of Surgery is offered to the public by A. S. Doane. We have withheld a notice of this work for some time, in the hope that we should be able to speak of it from our own inspection. But as we are not yet so fortunate, we are only able to say that it is compiled from the writings of Gerdy, Hard, Velpseau and Blasier; sources which, with the assurance the public possess of Dr. Doane's zeal and talent in this mode of communicating practical knowledge, may be considered surety for great usefulness of the work in the hands of every student, practitioner, and teacher of surgery.
The first five plates are devoted to bandages. The next twenty to fractures, and the remaining twenty-five or thirty to illustrate the principal surgical operations.

Mechanism of the Bruit de Soufflet.

In the second part of Dr. Corrigan's Memoir, read to the Medical Section of the British Association, at the Dublin meeting, we are presented with his views of the Mechanism of the Bruit de Soufflet, which are as follows:

"The sound depends on the simultaneous presence of these two conditions, viz: Ist, a current-like motion, of the blood (instead of its natural equable movement), tending to produce corresponding vibrations on the sides of the cavities or arteries through which it is moving; and, 2ndly, a state of the arteries or cavities themselves by which, instead of being kept in a state of tense approximation on their contained inelastic blood (which would necessarily prevent any vibration of their sides,) they become free to vibrate to the play of the currents within on their parietes; and by those vibrations cause, on the sense of touch, "fremissement," and on the sense of hearing, "bruit de soufflet." It was shown that these two conditions are present, in the parietes of the ventricle, and the currents of blood striking against them in cases of narrowed auriculo-ventricular openings; in the enlarged and tortuous arteries of the placental portion of the uterus permitted by their very free anastomosis with veins and sinuses, and other causes, to become partially flaccid in the intervals of the heart's contractions, and the irregular currents necessarily assumed by the blood in rushing along these comparatively flaccid tubes at their next diastole; and that similar conditions exist in the analoguous state of the vessels in aneurismal dilations of tortuous arteries. The presence of the two conditions was also applied to explain the mechanism of the sound in permanent patency of the mouth of the aorta, in the large arteries of animals dying of hæmorrhage, and in various other instances. In conclusion, two experiments were detailed, in which, in one instance, a small bladder, and in the other a portion of the gut of an animal, was interposed between two cocks, the upper or nearer being the cock of a water-cistern, and the lower or further constituting the discharging orifice of the bladder or gut, and water then allowed to flow through from the cistern. The sound "bruit de soufflet," and the sensation "fremissement," were perceptible in the intervening bladder or gut, until (from the upper pipe pouring in fluid faster than the lower discharged it) the bladder or gut became tense, and then both sensations ceased, the passage of the fluid through, nevertheless, continuing all the time. The experiment with the bladder was applied to explain the occasional presence and absence of "bruit de soufflet" in aneurisms, the sound being present in an aneurism when, from any circumstance connected with it, its parietes can become at all flaccid in the intervals of the heart's contractions,—not being heard if the parietes remain tensely applied to their contained fluid.