SOUTHERN

MEDICAL AND SURGICAL JOURNAL.

EDITED BY

I. P. GARVIN, M. D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS AND MEDICAL
JURISPRUDENCE, IN THE MEDICAL COLLEGE OF GEORGIA.

Medical College of Georgia.

"Je prends le bien où je le trouve."

VOL. VI.—1850.—NEW SERIES.

Augusta, Ga.
JAMES McCAFFERTY,
PRINTER AND PUBLISHER.

1850.
PART FIRST.

Original Communications.

ARTICLE V.


It is not designed, by the following observations, to enter into a labored attempt to reconcile the differences existing among medical men as to the modus operandi of the Sulphate of Quinine; but merely to bring before the readers of the Journal the results of our observations, with such views and deductions as seem to be most compatible with physiological science: and, for this, we conceive, there can be no apology necessary other than the fact, that many different and opposite views are set forth, upon this subject, by men equally entitled to credit. When the whole field is calmly and impartially surveyed, we are inclined to think that the greater differences of opinion depend more upon the importance attached to terms and technicalities, than upon facts and results.

A long essay might be devoted to the questions, as to what is a sedative, and what is a stimulant, without shedding one ray of light upon the modus operandi, or therapeutic properties of the Sulphate of Quinine; for these terms, the former especially, seem to aid but little in the explanation of the curative properties of any individual article of the materia medica. The human system may be said to be in a sedative state or condition, when it is enjoying the most perfect health—when it is free
from all irritation and morbid action; and any remedy, however, whose tendencies are to preserve or induce this healthy condition of the system, when diseased, is as much a sedative as any other, whether it be Calomel, Ipecac, Opium, Brandy, Quinine, Blisters, or Blood-letting. If this view of the subject be correct, then, the word sedative should not be applied to any one particular remedy or agent, rather than to another; since, in the main, they all tend, when properly administered, to restore the system to health—to remove the existing morbid impressions, and thereby to induce a healthy, and consequently a sedative action of all the functions of the system. So, if the word sedative has any meaning at all, it can only mean, in physiological science, perfect health, in the general acceptation of that term, and cannot be applicable, strictly speaking, to any remedy whose tendency is to induce that state, since, it must be confessed, that the remedy can only bring about the result by establishing a vital impression of its own, in the place of the one for which it was given.

But, when we turn our attention to the word stimulant, we find it has a just claim to attention; for, as we have intimated, it is a law of nature, and especially exemplified in the animal system, that to remove an existing impression we must establish, or substitute, another in its stead; consequently a stimulant impression is a reality—an effect not without a cause; for when we look into the modus operandi and the therapeutic properties of any and all of our medicinal agents, according to the generally received principles of physiological science, we are forced to the conclusion, that they all act by altering vital action, by means of impressions made upon the system. To say that any remedy (we care not what may be its name) can alter vital action, without at the same time producing a vital impression, would be to claim an effect without a cause. It may, however, be said, that reputed sedatives diminish existing impressions, and, in this way, tend to cure disease. If so, they must also diminish, or suspend, existing action, and by the latter effect render null and void the former; for if the morbid impressions are not removed, by the substitution of others of their own kind, how can diseased action be removed, or vital action changed? Hence, we conclude that all medicinal agents oper-
ate upon the system by making impression, (the word impression being only another term for stimulation,) and that different articles operate, as it seems, by predilection upon different organs: some upon the circulatory system, some upon the nervous and sensorial functions, and some upon the secreting and excreting functions; all of which organs or systems are so intimately connected together as to render it impossible for any one of them to be materially impressed without, at the same time, the others partaking more or less of the impression. Alcohol may be said to act upon the circulatory system, primarily and chiefly; opium, and its preparations, upon the brain and nervous system, primarily and chiefly, and calomel upon the secretions and excretions, and so on. It would be quite as proper to ask why the elements of water are oxygen and hydrogen, as to ask why this difference in the modus operandi of medicines. We know the fact in the one case, and we only know it in the other: the why, or the wherefore, in either case, is equally sub luce, and beyond which it would be altogether futile to attempt an inquiry.

From what we have said, it is obvious that we consider the Sulphate of Quinine a stimulant; and here it may not be amiss to state that we do not consider it an “antiperiodic” or a tonic any more than opium, brandy, or calomel, unless it is designed to mean nothing more by the words antiperiodic and tonic, than that all medicines, when properly administered, tend to change, or remove the internal pathological conditions, upon which the external phenomena of disease depend. If this be the intended meaning of the words antiperiodic and tonic, we readily admit it as being quite applicable to the quinine, and not to quinine only, but to all other remedies, in an equal degree with their curative virtues. An individual is attacked, to-day, with a chill, and it assumes the intermittent type: he takes quinine, during the intermission, and gets well, without another chill. Now is it fair or just to conclude, from these circumstances, that the quinine is peculiarly tonic or antiperiodic? The disease is, especially so far as the external phenomena are concerned, more or less periodic, (and so are all other diseases,) but this does not necessarily imply that the quinine, which cures it, or the remedy, or remedies, which cure
other diseases, are antiperiodics or tonics, any more than that the patient was perfectly free from all disease, or morbid action, during the intermission; for there must be in all cases, and at all stages of an intermittent, as well as in a remittent, however trivial the attack, more or less derangement of the nervous and sensorial functions, of the circulatory system, and of the secreting and excreting organs; though usually much less during the intermissions and remissions than during the stages of excitement. Now, to cut off the stages of excitement, all we have to do is to give the quinine, judiciously, during the intervals, and thus remove or change the nature of the existing morbid derangements, upon which the stages of excitement depend. Having much less to contend with during the intermissions and remissions, the quinine will certainly more fully display its virtues, as a curative agent. It is in this way, as we conceive, that this remedy has secured the appellation of antiperiodic, and not from any peculiar or intrinsic virtue that it may possess in anticipating and warding off diseased action.

It will not be pretended that there is, in any disease, a separate and distinct lesion for every seemingly different and distinct symptom. This is especially true as to the periodic fevers of the Southern and South-western States. Climate, sex, age, manner of life, occupation, epidemic changes, and vicissitudes of weather, as well as temperament, to say nothing of the different intensities of affection, all tend to modify very materially the external symptoms, without at the same time affording, in the most of cases, any just ground for a change of remedies, if the remedies be properly selected at the outset. This leads us to believe that the leading principles of the pathology, and consequently of the practice in our malarial fevers are but few, and simple. We always find patients, laboring under the primary symptoms of fever, however mild the grade, to complain of weakness in the limbs, with more or less inability to exercise the mental faculties, in some instances for days, and even weeks, before they are said to be taken sick. It is not reasonable to conclude that the weakness of body and mind, here, depend upon the excited state of the circulation, for this is but little, if at all, changed from the healthy standard, nor on a super-invigorated state of the brain and nerves. The
patient is quite rational, and there is yet but little or no derangement of the secretions. Why all this weakness? Does it not seem evident that there is debility in, or a want of energy on the part of the brain and its appendages? We think this question can only be answered in the affirmative. In this state of things, if we give quinine, in moderate and repeated doses, the strength and vigor of both body and mind will be increased, the pulse become less frequent, softer and fuller; the peculiar febrile restlessness, anxiety and lassitude, subside: the skin become more moist and softer; the thirst less urgent; and, in short, the condition and feelings of the patient will undergo a radical change for the better. Now if these are not the effects of the judicious administration of the quinine, in the forming stages of our autumnal fevers, we are ready to confess that it has no effect at all. But we go a step farther, and meet with cases presenting all the phenomena of our severest intermittents, where there is great anxiety and restlessness, the patient pitching and throwing himself from one side of the bed to the other, gasping, as it were, for fresh air, with great oppression and sickness at stomach, his extremities cold and clammy, whilst the temperature of the body is nearly or quite natural; a quick, weak, and frequent pulse, numbering from 120 to 140; great difficulty of breathing, with a dark reddish tint of the surface, with watery evacuations from the bowels, and more or less derangement of the mind. Such cases as these are by no means of very uncommon occurrence in the Southern States, and to look upon them is to be convinced that much that threatens life is at work. Is all that we behold dependent upon the excessive derangement of the secretions and excretions?—or does it depend upon the great derangement of the circulatory system, proper?—or upon the disturbance of the nervous and sensorial functions?—or, finally, does it depend upon violent and excessive functional disorder of all these systems of organs, in equal, or in different degrees? We would say that the first step in the morbid chain of diseased action in these cases is, (as we have intimated, was the case in the milder grades of our fevers,) derangement of the brain and nervous centres, and that this derangement consisted in debility, or a loss of energy; and that the next step, in the series of morbid action, was derangement of the circulatory system, and
that this derangement consisted chiefly in congestions of the internal vital organs; and that the third step in the series of morbid actions was, derangement in the secreting and excreting organs; and that all these organs are more or less affected in all cases of malarial or other fevers: they are not, however, disordered in every case equally; for we often find that the brain is more affected than any other organ, and again that the circulatory system, or it may be the secreting and excreting systems, suffer most; hence the diversity of symptoms, presented by the different attacks of the same type of fever. Whilst some are mild, others are exceedingly violent, owing to the different degrees of disturbance of one, or more, or all the different systems of organs involved.

Now, every practitioner who has had any experience in the management of the severer forms of intermittent, or "congestive fever," cannot have failed to notice that the patient had had one or two milder chills, previous to the severer ones, or, if not, had been, in the general understanding of the term, unwell for one, two, or three days, before he was taken with the ('congestive') chill; and, further, that this previous ill health differed, in no essential particular, from that preceeding confinement to bed from other types of fever, viz: weakness of body and mind; lassitude, with an aversion to both corporeal and mental effort,—all denoting debility, or a want of energy, in the nervous and sensorial functions, in very many cases, long before the case became at all alarming, or there was any chill. Now, if these facts prove any thing, they shew that the first step, in the chain of morbid action (as has been intimated) manifests itself in the brain and nervous system; for if we will take the trouble to observe closely the train of symptoms here, we will, in nine cases out of ten, find that a want of energy in the nervous and sensorial functions, invariably precedes any appreciable change in the vascular or circulatory system, even in those cases in which the patient may be carried off in ten or twenty hours after he is said to be first taken. In fact, we have made it a matter of particular observation, that patients invariably complain more or less of those feelings which indicate a want of nervous energy, for some time before the circulation becomes at all excited, or deranged, especially if the
patient remained at rest. Finally, the chill comes on with a decided pain in the head, back and limbs; excited pulse, internal congestions, which are followed of necessity by more or less derangement in the secreting and excreting organs, as they are chiefly composed of the capillary extremities of the arteries.

Now what are the legitimate deductions to be drawn, as to the practice? Here, according to the universally acknowledged principles of physiological science, we must not attempt a cure by drastic cathartics or emetics; nor by regulating the action of the heart or arteries, by blood-letting. Neither can we expect a cure by the free use of brandy or alcohol, in any modification whatever. The reason is, (as we conceive,) that when we depend upon cathartics or emetics, or both, we only reach, and operate upon, the third morbid change in the succession of diseased action—derangement of the secreting and excreting organs, which depends upon the derangement of the circulation, and thus, instead of tending to effect the cure, we add fuel to the fire, by increasing the already existing gastric and intestinal irritation and debility, without, in the slightest degree, reaching and operating (favorably at least) upon the primary derangement—the debility or depression of the nervous and sensorial functions. As to the blood-letting, the same principles hold good; for by it we can only attempt the removal of the effect without removing the cause—the debility or depression of the nervous energies. The same objection applies to the effects of the brandy or alcohol, in any of its modifications; for these operate more directly upon the circulatory system than upon the nervous, and thereby tend to aggravate the already existing derangement and irritation, here, as well as that existing in the secreting and excreting organs, without at the same time operating, beneficially, upon the brain and nervous centres.

If it be a fact that all medicines act, in curing disease, by changing vital action, and that this change can only take place by the remedy substituting an impression, and mode of action, of its own; if it be a fact, that the difference, in the effects produced by the different articles of the materia medica, are as great as their number, or as the organs and tissues, composing
the human system, and that no two operate in every respect alike, and that some operate, as it would seem, by predilection upon one organ, or system of organs, and some upon others; if it be a fact, (which we think cannot be denied with any show of truth,) that in all our malarial fevers, over which the quinine holds such universal sway, the first morbid derangement invariably is debility or depression of the nervous and sensorial functions; that the next morbid change is in the circulatory system proper; that the last, shows itself in the secretory and excretory organs, and that the first depends upon a particular cause, such as malaria, or a number of causes combined, and that the second depends upon the first, and the last upon the second, and that this is the invariable order of the succession of morbid action, in all our malarial fevers, from the most trivial to the most alarming cases, and that the diseased action is always the same, in kind, or quality, the external phenomena differing only in consequence of the different degrees of intensity of affection of any one or all the organs involved; and still further, if it be a fact, that inflammation does not necessarily constitute a part of these fevers, and, further still, if it be true, as has been amply attested by experiment, and otherwise, that the effects of the sulphate of quinine, upon the brain and nervous system, when given in large doses, are very analogous to those of the alcoholic stimulants, without at the same time producing the same amount of vascular action, then we think we can offer, at least an apology for our views upon the modus operandi and therapeutic properties of the Sulphate of Quinine, in our malarial fevers.

Whilst we consider quinine a stimulant, we do not deem it a stimulant, whose modus operandi, or therapeutic properties, are similar to those of the alcoholic stimulants; for this very obvious reason, that whilst the primary and almost the entire effects of the former are spent upon the nervous, the primary and almost entire effects of the latter are expended upon the circulatory system, especially when they are both administered in quantities not transcending the rational indications of physiological practice. This, when we take into consideration the indications, presented to our view, of the internal conditions of all the systems of vital organs, readily accounts for the differ-
ence of their modes of operation. All things being equal, whilst the quinine gives vigor and a controlling energy to the nervous functions, the brandy, or alcohol in any form, tends to increase and to aggravate the already too highly excited condition of the circulatory functions, and thereby increases the existing derangement of the secreting and excreting organs—whilst the quinine tends to remove the cause, the brandy tends to farther develope the sequent—whilst the quinine will relieve internal congestions through the medium of the nervous system, the brandy will inflate, as it were, the vascular forces, and produced a super-excitation through the medium of the circulatory system.

We freely admit that alcohol will excite and stimulate the nervous system, yet we deny that this is its proper field of action. We admit also that quinine will stimulate the circulatory system, more or less, when given to an undue extent; but we at the same time deny that this is its field of action. Why should we refuse to call quinine, with opium and its preparations, stimulants, if their effects are different from those of the alcoholic class, or even from each other, especially, when we recollect that whilst the one class operates upon the nervous, the other acts upon the circulatory system. Might it not be anticipated, that whilst we admit all of them to be stimulants, their results upon the system would be quite different?

Thus it is seen that we are not only inclined to reject the notion of quinine being a sedative, but also to reject the notion of all sedatives, as well as antiperiodics and tonics, upon the same grounds, as without any foundation, either in observation or physiological science.

What then is the conclusion? It must be already fully anticipated. Apart from experiment and observation, the conclusion that forces itself upon us is, that quinine, in the proper and obvious sense of the term, is a stimulant, differing in many respects from all others; and that to realize the benefits of its proper and legitimate effects, as a curative agent, it should always be given, if possible, in exact proportion to the extent of the debility or depression of the nervous and sensorial functions. In the milder cases of our periodic fevers, from one to two grains every hour, or every two hours, will suffice; whilst
in the more malignant attacks, from five to ten grains every hour, or oftener, may be required.

In conclusion, we would state, that there may be many objections to the views advanced in this article; but we are confident that they will come with much more ease and plausibility in the shape of questions than answers, founded upon reason and observation, for it is much easier to ask questions, especially in medical philosophy, than to answer them.

ARTICLE VI.

Remarks on the Treatment of Internal Hemorrhoids. By I. P. Garvin, M. D.

There is probably no disease of more frequent occurrence than Hemorrhoids, nor are there many in which the ordinary modes of treatment are usually less efficient. Comparatively few adults in our section, who reach the middle period of life, escape the annoyances produced by this troublesome complaint. In a large proportion of cases, the disease is slight, and is borne without any call for medical aid; but the instances are not infrequent in which it is sufficiently severe to produce much suffering, and to impair seriously the general health. When such a state of things occurs, many physicians recommend the extirpation of the tumors by a surgical operation. That such advice is sometimes judicious, we are not disposed to deny, but such operations are not free from dangers, both of a primary and secondary character, and should therefore always be avoided, when possible. We are fully persuaded that an operation would be rarely necessary if a proper treatment were adopted, and perseveringly followed for a sufficient length of time. Circumstances that need not be mentioned have induced us to give a considerable share of attention to this subject, and as we have treated a very considerable number of cases, some of them very severe, and of long standing, with very general success, we have supposed that a brief account of the treatment adopted would not prove useless or unacceptable to the readers of the Journal. But we must premise that in
this treatment there is nothing novel, for the remedy upon which we mainly rely is cold water, yet our mode of employing it is not in general use.

The application of cold topics to inflamed tumors is universally known to be a very efficient treatment, but the inconvenience of such applications to such tumors as are internal, generally prevents a resort to this remedy. For many years we have been in the habit of employing enemata of cold water in every case of internal piles which we have been called to treat. We direct that about a gill of cold water be thrown into the rectum immediately before every attempt to evacuate the bowels, and that this enema be retained several minutes if possible. This usually produces an evacuation of the feces, which have been so far softened on their surface, as to permit their escape without the least straining or irritation. After every evacuation, it will be proper to use ablutions of the parts, more especially in such cases as are attended by some protrusion of the bowel.

Though this treatment is a valuable palliative from the moment it is begun, it will do much more than palliate, if perseveringly continued. The length of time required will necessarily vary in each case. The proper course is to continue this treatment until some days after all uneasiness is removed. In old or very severe cases, to effect such amendment, generally requires several weeks. It is highly important to impress upon the patient, the absolute necessity of perseverance in the use of the cold water, even though he should be so far relieved as to feel almost well, for if it be suspended too soon, a very slight cause will bring on a relapse. So decided is the relief afforded by this treatment, that few persons would be disposed hastily to abandon it, but for the inconvenience of applying it daily. The ordinary apparatus for enemata are so unwieldy, that they cannot be carried about conveniently. All difficulty from this source may be obviated by the employment of a small pewter syringe with a ring handle to the piston. One which will hold two ounces is very convenient, and may be carried in the pocket, when necessary.

When such enemata of cold water fail to procure sufficient alvine evacuations, the quantity of fluid may be increased to
half a pint, or it may be necessary to resort to mild laxatives. Active purgation must be carefully avoided. The patient should be advised, never to aid the natural expulsive action of the bowels by straining. If an evacuation cannot be procured without such efforts, it is best to postpone it until aided by the action of a laxative. If the convenience of the patient will permit, it will prove advantageous to change the usual hour for the daily defecation, to a regular hour in the evening—just before retiring for the night. This will obviate the gravitation of blood consequent upon the erect position.

This treatment will usually succeed equally well in hemorrhoids attended by hemorrhage. In this form of the disease, cold water will be found a most efficient astringent. We have employed enemata composed of the vegetable astringents, and also of the acetate of lead, but have never found them to succeed so well as the cold water. They are, moreover, liable to the objection of producing considerable pain, and disposition to strain, when they are evacuated. The effects of this simple mode of treatment are often surprising in some of the worst cases of hemorrhagic piles, especially when aided by such other treatment as the state of the general system may require. About two years ago we prescribed for a gentleman who had been a martyr to this form of the disease for several years. From having been remarkably fleshy, he had become very much emaciated. His skin had assumed a cadaverous hue, his nervous system was much disordered, and his strength greatly reduced. He at once began the use of the cold water enemata, and for the relief of the anaemic condition took five grains of the Citrate of Iron twice a-day. Such paliatives as the deranged state of his nervous system required, were given from time to time. In the course of two or three weeks, the amendment was very evident: the hemorrhage was sensibly diminished—his strength began to return, and the roses once more to bloom upon his cheek. The amendment was steadily progressive, and after the lapse of a few weeks, the patient was restored to his former rotund dimensions, and the enjoyment of general good health. Since then, there have been occasional indications of relapse, which have been promptly removed by a return to the cold water enemata.
In the summer of 1848, we prescribed this treatment for a gentleman who had labored under bleeding piles with considerable prolapsus of the bowel, for a long period, but whose general health had as yet suffered but little. We heard nothing of him for several months, when he informed us that he had left off the enemata because they had checked the discharges of blood so completely, as to induce a fear lest its sudden suppression should develop some other malady. We might cite a number of cases treated with similar results, but we deem it unnecessary, as we presume those referred to are sufficient to demonstrate the value of the treatment.

Many cases are connected with chronic diarrhoea, hepatic derangement, etc., etc., and will require appropriate general treatment as well as the local. As it has not been our purpose to write an essay upon hemorrhoids, but merely to urge the employment of a very simple and at the same time a very effectual topical remedy, we have not noticed the general treatment required by those cases in which something more than local remedies is necessary.

While we have no sympathy for Hydropathy, or any other of the empirical systems which have become so fashionable, we are free to admit that we look upon cold water as an invaluable, yet too much neglected remedy in many diseases, and we are persuaded that its simplicity has tended very much to cast its virtues in the shade. Whilst the medical profession very properly reject Hydropathy as a system, it certainly becomes them not to turn over to its followers, an agent so potent for good, as cold water.

---

**ARTICLE VII.**

**Dissection of a large encysted Haematocele from the Spermatic Cord.** By Paul F. Eve, M. D., Professor of Surgery in the Medical College of Georgia.

On the 21st January last, Col. G., of South Carolina, brought to me a negro man aged about 25, laboring under inguinal Hernia of the right side, and a large Tumor in the spermatic cord of the same side. The rupture was of some years duration, was reducible, and a truss was worn for it. The tumor was of recent origin, dating back only five or six weeks, and was grad-
usually increasing in size. It was for this second affection that I was consulted. The patient said, in lifting a carriage obstructed in the road, he felt something give way at the place where the tumor now exists, and he soon after detected a swelling there about the volume of a partridge egg.

In operating the next day before the Class in the College, an encysted tumor of the spermatic cord, containing blood or water, was pronounced to be the diagnosis. It was quite evident that the hernia did not communicate with it. A careful dissection was now commenced upon the tumor, dividing tissue after tissue, making some eight or ten laminae, opening the cord so as to expose its vessels, the veins particularly, and finally, a tumor the size of an orange was presented in the palm of the hand. It was almost perfectly round, as much so as any one I have ever seen; its cyst was laid open, and bloody serum was discharged with a coagulum, and the internal surface covered over by fibrine.

The patient was under chloroform, which acted admirably. There has been considerable tumefaction in the scrotum since the operation, but the patient is now up and doing well.

PART II.

Reviews and Extracts.

The Causes, Effects and Treatment of Uterine Displacements.
By M. Velpeau.* (Revue Med. Chir.)

Causes of displacements.—Arising from mechanical causes, deviations of the uterus seem at first to act only mechanically, and give rise alone to mechanical disorders. Among those who support the doctrine of uterine engorgement, there are

* An interesting discussion of the subject of uterine engorgements has recently taken place in the French Academy of Medicine, and has been protracted through several meetings. The remarks of M. Velpeau appear to have excited much attention and opposition, as his views are adverse to those held by most practitioners. The high professional rank and eminent ability of M. Velpeau, impart great interest to every thing which emanates from his pen, and we therefore have given his remarks at length. Should the views of other gentlemen opposed to him be written out, we will endeavor to present them to our readers.
some who admit the existence of uterine deviations, but attribute them to engorgement. According to these, the uterus does not descend, does not deviate, nor is it inflected, but by its weight, when augmented by excess of volume at some point—in a word, deviation, is not a primitive state; it is only an effect, a consequence of engorgement. Nothing is exact in this doctrine. I have proved in a number of instances, both upon the living and the dead, the existence of uterine deviations, without there being the least increase either in the size or weight of the organ. When there is hypertrophy with deviation (which I have occasionally observed, sometimes throughout, sometimes in the anterior or posterior portion only,) I am convinced that, so far from being the cause, the engorgement was the result of deviation. Once bent upon itself, the uterus is not as permeable to the circulating fluids in certain portions as it was before; hence the derangement in its functions, which might evidently produce hypertrophy. I will admit, on the other hand, that rigidity of a portion of the organ may favor one of the inflections of which I speak; but, at the same time, this etiology is only applicable in cases of deviation where there exists at the same time an excess either in volume or weight of the uterus; and I repeat that these cases are by far the most rare.

It is under the influence of chronic inflammations, old adhesions in the regions of the peri-uterine tissues, repeated pressure, &c., that uterine deviations are produced. Cough, vomiting, the act of lifting or carrying a weight, efforts at stool, everything, in short, which compresses the viscera upon the body of the uterus, the neck being naturally more firmly fixed in front and behind, either by the utero-sacral or utero-vesical ligaments, predispose to this kind of lesion. Any quick or sudden motion when the uterus is relaxed to a certain degree, as at the approach of the menstrual period, abortion, or labour, is sufficient to produce inflection. I have frequently thus arrived at the origin of the disease in females who consult me, and I am convinced that by examining closely, it will be found that a large portion of deviations occur in this way.

Effects of displacements.—As I have said long since, (see my clinique, vol. ii, 1840), these deviations alone, are frequently
entirely inoffensive, and a number of women are affected with them without being aware of it. It is not impossible, however, for them to produce derangement, and these derangements are of three kinds—1st, the mechanical inconvenience which the displaced uterus occasions around it in the pelvis; 2d, the pulling and stretching of the vascular and nervous filaments which come from the renal plexus and sides, which is produced by the descent of its fundus; 3d, to the narrowing of the uterine isthmus, that is to say, the internal orifice of the neck of the womb.

Whenever the uterus deviates from its parallelism with the axis of the pelvis, the functions of the rectum, of the bladder, and of the nervous and circulatory systems, are in danger of being disturbed. When the patient complains of a weight about the fundament, tenesmus, constipation, frequent desire to urinate, &c., numbness of the whole pelvic cavity, to such a degree, that some believe that they are rather affected with disease of the anus or intestine, than of the womb. Being depressed, the connections between the uterus and great sympathetic plexus naturally produce certain effects upon the whole digestive and nervous system; hence those pains and un easiness in the back, weakness, difficulty in walking, &c., and those thousand other inconveniences which torment both patient and physician. Free to descend a little lower in the pelvis, the intestinal mass plays its part in the production of like symptoms by reacting on the stomach, the liver, and the spleen. It is with such accidents that physicians have to contend in females said to labor under engorgement, but who really suffer from displacement.

It must be evident to any one who will reflect for a moment, that the canal of a deviated womb must lose its dimensions at the place of the inflection, especially as this is almost always opposite the internal orifice, that is to say, the part of the uterine neck, naturally the most narrow. It will be seen at a glance, that an obstacle will be thus produced to the passage of the menstrual fluid, or any other matter to be expelled from the uterine cavity. From this cause, many females complain of acute pains and colics in the uterine or hypochondriac regions at the approach of the menses, and even during the whole
menstrual period. The passage of clots then gives rise to sufferings almost equal to those of labor, until they are discharged. I have seen many such cases. Some who have been in this condition for years have been relieved by dilatation of the narrowed neck, with bougies or sounds. Such cases point out the relation which exists between dysmenorrhea and uterine inflexions.

The narrowing of the uterine canal, though it may arise from other causes, is equally a cause of sterility with uterine deviations. Besides the greater difficulty with which the seminal fluid reaches the orifice of the ostinae, this fluid when it has entered it, is again arrested by the constricted and changed direction of the uterine cavity, so that under such circumstances fecundation becomes very difficult.

The subject of sterility is a very delicate one, and I shall therefore make but few remarks upon it now. Guided by the preceding etiology, I have treated a great many cases of sterility by dilatation of the narrowed uterine orifice: small bougies and sounds have opened the way for still larger instruments, which have permitted me to cleanse the uterine cavity by injections, and even to effect slight cauterisation. Young females who have been married for two, four, six, and even ten years, without having been impregnated, have conceived as soon as this treatment has been completed.

Treatment of uterine displacements.—The treatment of uterine displacements, notwithstanding its apparent richness in remedies, unfortunately leaves much to be desired. Without any good reason pledgets of various kinds, tonic, astringent, emollient, etc., introduced into the vagina, have been employed. For nearly thirty years I have used such applications made of saw-dust, of tan, or of powdered cinchona. Like others, I have resorted to sponge, either covered or not with fine silk, and impregnated with some medicated fluid. By these means, much relief has often been obtained, but such applications will not relieve all cases, and moreover they will not correct the displacement of the womb. I have tried all kinds of pessary, with but little success. It is easy to understand why they generally prove inefficient. The womb is so mobile, so slightly supported, that an instrument which will not hold it by the fundus will

N. S.—VOL. VI. NO. III. 10
scarcely be able to fix it. When the case is one of anteversion or retroversion, a well adjusted pessary may possibly be useful. Once the neck of the womb is engaged in the cavity of the instrument, and is raised up, and placed in the axis of the cavity, it will in some instances remain there permanently, and give much relief. But in cases of inflexion, the value of pessaries is very questionable. In these cases, the neck of the womb being still in the centre of the pelvis may be engaged in the ring of the instrument, without in the least altering the position of the organ, and moreover is constantly escaping from it upon the least movement.

Except in a few rare cases, pessaries made thicker on one side than the other, do not succeed much better, inasmuch as the organ and the instrument, rarely preserve their proper relations for more than a few moments. If they do give relief in some cases where there is inflexion, and not simple deviation, it is because they give support to the uterus, and not a better direction to the parts.

Being discontented with all known pessaries, about twelve years ago I invented one which was intended to act directly on the deviation. It was armed with a stem of gum-elastic, from 5 to 8 centimetres in length, intended to pass up into the womb as an axis. It formed a portion of a disc, which I turned before in retroflexions, and behind in anteflexions. I used at the same time, as a rectifier, an articulated rod, similar to that proposed by M. M. Tanchou, Pravaz and Leroy d'Etiolles, for straightening the prostatic region of the urethra. Carried bent, either through the stem of the pessary, or directly into the cavity of the uterus, the instrument was then straightened gradually by a few turns of the screw. Three or four women bore these attempts very well, but inasmuch as many others were threatened with metritis or peritonitis, and as I feared ulceration or penetration of the uterine tissue by the stems of which I have spoken, I determined to abandon them.

Would we be more successful by introducing foreign bodies in the anus? A bit of prepared sponge about the size of a finger, covered or not with fine silk or cloth, and carried dry to the neck of the womb in anteflexion, and even beyond the fundus in retroflexion, would produce a decided straightening as soon
as it imbibed, and became distended with fluid. It is unfortu-
nate that most females entertain great repugnance to such a
remedy, which in fact is very difficult, and inconvenient in its
application. I ought also to mention as another means, the
introduction of an empty bladder into the bowel, which is then
to be distended with some fluid injected into it.

As all these means occasionally relieve, they may be tried;
but as none of them really cure, or rectify the inflected organ,
it is clear that we have need of something more efficacious.
The pressure of a pessary or other foreign body on the vagina,
the womb, etc., is liable to so many inconveniences, that I asked
myself twenty years ago, if certain kinds of belts would not
answer better. At first I had one made by Madame Martin;
afterwards came those of M. Hall, Duvoir de Bechard, Madame
Girard, etc. I did not expect by the aid of such means to rectify
the position of the womb, even where there was only a simple
deviation; but with the hypogastric plate of some of these belts,
particularly those of Duvoir de Bechard, we may raise up,
and retain the abdominal viscera, whose weight, arrested
above the pelvis, will cease to press upon, and weigh down the
fundus of the womb; the neighboring organs, the bladder, and
rectum, thus relieved, will perform their functions better, and
the whole abdominal nervous system being no longer irritated,
the digestive functions will be restored, and all the general dis-
turbance of the system obviated. Moreover, we may asso-
ciate these belts with the employment of sponges, or vaginal
pledgets, by means of a strap passing under the pelvis, pro-
vided with a perineal pad. Sustained by this strap, the pad
placed between the anus and vulva, presses up the perineum,
and thus gives a very important support to the uterus.

For twenty years I have prescribed these belts for many hun-
dreds of females, who for the most part were benefitted. Some
could not endure them, and of course were not relieved; but
in general, the patients who consented to wear them for at least
a week, and who did not reject them on the first unpleasant
sensation which they produced, soon experienced such relief,
that they were neither able or willing to do without them.

When the uterus is let down as well as deviated, the perineal
pad is useful; also in women who have a very large pelvis.
The belt alone will be sufficient in other cases, especially where it is employed to elevate a womb made voluminous by some tumor, or abnormal condition. The belts called hypogastric, are those which I have so far found best; I cannot say, however, that we need no other remedy.

It is well understood, that all I have said applies only to the mechanical or local treatment, and does not refer to the advantages that may be obtained from general medications in such cases.

As I have announced at the beginning of this discussion, it is only of the body of the uterus that I have spoken in the preceding argument, when it was a question of engorgement. It was not because I was disposed, as some appeared to think, to admit engorgements of the neck without dispute—to admit especially the frequency of that pathological state in the neck, when I called in question its existence in the body of the organ. My design was simply not to discuss that which concerned the neck at first, because I wished to discuss separately, that which relates to maladies of this part of the organ.

I have been asked if I comprehended engorgements of the neck in my denunciations. By answering no, but that I would reserve the question in relation to the neck, for another time, I did not intend to give my opponents a right to conclude that I readily admitted the existence of such engorgements.

Now what shall I say of engorgements of the neck of the uterus? If I do not deny their existence, will it follow that I admit them? By no means; for a fact may not be admitted, the possibility of which cannot be denied. When chloroform was accused, I rejected the proofs that were offered, without denying that the thing was possible. More conclusive observations have been submitted, and I have admitted the fact. So with uterine engorgement; tell me what it is—let me see it, and I will admit it. Prove that there exists a chronic, persistent, pathological state, distinct from chronic phlegmasia, and hypertrophy, which is neither the result, nor the complication of any other malady; in fine, a pathological state which constitutes a distinct disease, primitively independent of any other affection already known under a special name, and I will admit engorgement. Until then, it appears to me logical to remain in doubt,
and to say, that in the neck, as well as in the body of the uterus, essential chronic engorgements are as rare, as they are thought to be frequent, even if they exist at all.

If it is true that the neck is often enlarged, it is equally so that we may be easily deceived in this respect. The finger deceives less than the sight. The speculum is a source of errors which must be guarded against. By its vaginal extremity, it tends to open the lips of the ostinæ, and fully to uncover the apex of the uterus; the neck often appears much more voluminous than it really is. Who does not know, moreover, how numerous are the varieties in the volume of the neck of the womb presented by different healthy females? Hard and flattened, or conical in some, soft and swollen in others, it is sometimes regular, sometimes uneven; sometimes elongated in one direction, and shortened in another. It likewise presents an almost infinite variety of colour, and of length, without being diseased.

I have no desire to sustain the opinion, that the neck of the uterus is never more voluminous than it should be, or that diseases may not augment its dimensions; I only deny, that the excess of volume, when it is pathological and persistent, merits the name of engorgement. Then there is either simple hypertrophy, which constitutes a deformity rather than a disease, or a state of congestion, with heat, and even pain, which borders closely on irritation or sub-inflammation, a state always transient; or else, some affection more serious which ought to give a name to the disease, and should attract the principal attention of the physician. Shall we then give the name of engorgement to the disease, merely because the volume of the organ is augmented, when there exists at the same time either cancer, tubercles, vegetations, fungosities, granulations, ulcers, etc.?

Admitting, as has been done, that engorgement is a morbid entity, a distinct malady, you will have a special treatment for this supposed affection, as you have for pneumonia or intermittent fever. Now I ask, would it not be ridiculous to treat in the same manner, hypertrophy, sub-inflammation, granulations, fungosities, ulcerations, cancers, etc., of the neck of the uterus? At least until the existence of a real disease, distinct from all those that I have indicated, shall be demonstrated, I persist in
declaring that it is useless, and even dangerous, to maintain in
theory, or in practice, the idea of a special disease under the
title of engorgement.

One word more. To explain the pretended engorgements
of the uterus, M. Robert has spoken of an affection which he
seems to think new, and to have been discovered by M. Reca-
mier. If I understand him correctly, this disease consists of
fungosities, or vegetations of the size of a grain of sand, or the
head of a pin, or even of a hemp or currant seed, which some-
times stud the whole uterine cavity, and bleed upon the slightest
contact, and even without any friction. In this case I must be
permitted to express the same doubt as in cases of engorge-
ment. Setting aside vegetations and cancerous fungosities,
the description of M. Robert can only relate to those granula-
tions that I demonstrate weekly at the Charité, observe daily,
and have described, as well as other practitioners, very fre-
quently during the last fifteen or twenty years. It is then
perfectly useless to create a new designation, since this disease,
which is quite common, is known to, and admitted by every
one. This new name seems to me, moreover, to be danger-
ous, for it has given birth to an operation which I believe to
be useless, as well as highly objectionable. This abrasion, this
scraping of the interior of the womb by means of a curette, a
kind of small metallic spoon, of which M. Récamier speaks, will
never be looked upon as an operation free from danger; its
inutility at least is so manifest, that M. Robert admits that it is
not sufficient alone, but must be associated with injections and
cauterisations. Now, numerous observations and experiments
authorize me to declare, that, with a mop of lint, wet with the
acid nitrate of mercury, and passed once a week into the uterine
cavity, I have almost uniformly removed this granular and
bleeding state of the genital cavities. I will add that some-
times simple emollient, detersive, astringent, or tonic injec-
tions, are sufficient of themselves to effect a cure, or at least to com-
plete it after the slight cauterisation to which I have referred.
This, however, is a subject superadded to the discussion, and
would lead us too far, if we were to examine it thoroughly
at this moment.

I will sum up my remarks.
1. Engorgement of the neck or body of the uterus as a distinct malady, a chronic and primitive state, is yet to be demonstrated.

2. Supposing that engorgements do exist, they are at least extremely rare, as rare as they have been thought frequent.

3. This name has been given to a number of diseases which have an admitted existence, and of which it is but a symptom; we are especially liable to be deceived by deviations of the uterus.

4. The deviations which most frequently mislead in this case, are of two kinds: those with inflexion, and those without inflexion of the organ.

5. These inflexions deceive because in forming a diagnosis by touching through the vagina or rectum, the examination is too frequently made when the patient is in the erect position.

6. With the patient lying on her back, and the muscles relaxed, we arrive at a correct diagnosis, in a certain sense mathematical, if the finger is passed into the rectum or vagina, and the other hand is applied to the hypogastrium, so as to grasp and force down the uterus, thus enabling us to appreciate correctly its volume and consistence.

7. Inflexions of the uterus are as frequent, as they are supposed to be rare; ordinarily simple, they are in general the cause, and not the effect of the hypertrophy which sometimes accompanies them.

8. They are not of themselves of a serious nature; for many females are thus affected without suspecting it; and general and internal medications can only remedy their effects, or their complications.

9. Among the mechanical and palliative means, hypogastric belts are the most useful, and the least inconvenient.

10. Next to malignant and cancerous diseases, and tumors, the granular state, either of the os tincae, the neck, body, or cavity of the uterus is the most frequent affection.

11. The best topical treatment for this condition, is cauterisation with the nitrate of mercury, and nothing indicates that the method of abrasions are ever necessary for its removal.

Such are my views on this important question, and to these I shall adhere, until my propositions have been demonstrated to be erroneous.
I am persuaded that this discussion will not be useless. Those who think so, forget, that beyond these walls there is an immense number of our brethren, who hear us through the journals, and having no preconceived opinions, will examine anew in their practice, the questions which are agitated here. I feel assured that this discussion will dissipate more engorgements than all the iodides and imaginable discutients. It is scarcely necessary to say that the question of deviations has been but slightly touched upon, and I shall treat of them in detail elsewhere.

On the Mechanical Treatment of Sterility. By Henry Oldham, M. D. (Guy's Hospital Reports. Amer. Journ.)

There have been three plans of treatment of a mechanical kind, for the cure of dysmenorrhœa and sterility, recommended and practiced; and it is impossible for any one in practice in this city [London] as an obstetrician, and who reads the weekly and monthly journals, to be blind to the fact, that these means have of late been unsparingly and boldly employed. They consist, first, of the dilatation by metallic bougies or sponge tents, or by section of the os uteri internum and externum; secondly, of the removal of the front or back displacement of the womb by Dr. Simpson's uterine stem supporter; and, thirdly, by probing the Fallopian tubes. It is impossible for me to omit the notice of these expedients; although, if the womb be ascertained to be undersized, they would, I should hope, be abandoned in reference to it. No cutting, or dilating, or supporting, or probing, can make a small womb larger: and the amount of uterine stimulus which they would excite would be considered far too important to justify their use. I know, however, that the characters of the reduced womb (if I may so call it) are not always appreciated in their entirety; and a source of error may arise from mistaking the natural and proportionate smallness of its orifice for a contraction to be removed mechanically. The anteversion I have noticed would, by some, be regarded as an efficient cause of sterility and dysmenorrhœa, and the uterine supporter be applied; while I suppose that Dr. Tyler Smith, if one or both these plans had been tried and failed, would, par voie d'exclusion, consider it as coming within the undefined limits of tubal catheterism. The few remarks, however, which I shall make upon this subject, must be supposed to apply to the mechanical cure of sterility and dysmenorrhœa generally, without any
strict application to these disorders as connected with the undeveloped womb.

There are few cases which come before an obstetric practitioner which are so full of perplexity as those of sterility, especially where it is limited to those cases where the os and cervix, and body of the uterus are free from any recognizable disease. Recent researches have afforded most valuable information on the composition of the male and female generative elements, and the physiology of generation; but our knowledge of the various causes by which impregnation is intercepted or prevented is very limited. One of these, no doubt, is any such partial or complete occlusion of the sexual canals as to prevent the transmission of the semen. Others are to be found in imperfectly developed ova, within a shrunken ovary, or some defect in the semen, or a want of congruity between the two elements. These are subtle and concealed causes, difficult, and, with our present knowledge, almost impossible to detect, but of infinitely greater importance in their relation to primary sterility than the mechanical obstacles which have of late so exclusively engaged attention. It appears to me that the cases which justify the use of mechanical treatment require the greatest discrimination, not only on account of the facility with which they may be confounded with perfectly natural conditions, but also because these operations are not without danger. There is scarcely any amount of danger or pain that women will not go through to obtain the prospect of becoming mothers. They are notoriously credulous as to success, and are the ready, and often the costly victims of empiricism; and I would venture to say, that obstetricians ought to be nicely scrupulous in encouraging a plan of treatment of a very doubtful efficacy, and dangerous to life. I cannot imagine a position more overwhelmingly distressing to any right-minded man than to have been the means of destroying the life of a woman in the endeavour to remove sterility. And yet I am sure that, in these operations, a hazard is run quite disproportioned to the amount of good accomplished; and I shall recount two fatal cases which have come to my knowledge; and I cannot but infer that others of a similar kind have occurred, but have not been recorded side by side with those of a more fortunate issue.

I feel great confidence in saying that the true congenital stricture of the os uteri, externum or internum, or of the Fallopian tubes, sufficient to prevent impregnation, is very rarely to be met with; and yet nothing is more easy, with the idea of a mechanical impediment in the mind, than to be self-persuaded into the belief that the natural orifice is too small. It is quite
impossible to fix a standard size for the inlet to the womb. It has often happened to me to feel the virgin os uteri extremely small, and yet pregnancy to take place. The sound, too, is a very insecure guide to the measurement of the os internum; and I think it is a most reprehensible practice to allow a neuralgic dysmenorrhœa, whose seat I believe is generally in the ovary, and very imperceptible, round aperture perforating a bulky cervix. When the tissue of the cervix is not so condensed, but has its normal, yielding feel, I doubt altogether the propriety of regarding even a very small os uteri as a stricture one. I have myself successfully treated by dilatation some cases of the kind above cited, but they are very few, compared with the large number which come under my care.

I. I am indebted to my friend Dr. Golding Bird for the following instructive case. On April 7th, 1849, I received from him the uterus and appendages of a lady who died from peritonitis, excited by attempts to cure sterility by mechanical dilatation, whose history, as furnished to me by Dr. Bird, is as follows, and with whose concurrence I publish it:—

"A lady of dark complexion, aged 36, married several years, and never pregnant, resided in Jamaica. From youth she suffered intense dysmenorrhœa, and always had pains during sexual intercourse. She was nervous, hysterical, and excitable to the last degree, and was supposed to have suffered from every possible form of inflammation; these attacks obviously being neuralgic, so common in hysterical women. In June last, by the advice of her physician in Jamaica, she came to London for the express purpose of having the os uteri dilated, which had already been attempted by wax dilators. The obstetric physician who was consulted in London coincided in this opinion, and thought the sterility and dysmenorrhœa depended on a stricture of the os uteri. He divided the os uteri with a cutting instrument, and introduced silver dilators. This produced horrible suffering; and, although at first she fancied the pains of menstruation were rather better, they soon became as bad as ever, and she did not experience the slightest relief. She left off the treatment for a time, but was soon again inclined to resume it; and silver canulæ were passed into the os, and left there. Again she suffered frightfully. On Saturday, March 31st, a gentleman, the assistant of the physician, passed in another tube, but the distress was
intolerable; and sickness and shivering coming on, she urgently begged her sister to try and remove it, which she succeeded in doing. Getting worse, a neighboring surgeon was summoned, and he found her laboring under what he regarded as peritonitis masked by hysteria. She had scarcely any fever, collapse coming on almost immediately, and she continued sinking until Tuesday, when I (Dr. G. Bird) was summoned to her. I found her at her sister's residence at T—— Park, presenting almost the collapse of cholera: pulse 200, and a mere thread; distended abdomen; vomiting of black fluid; intense irritability. All treatment was useless, and she soon sunk. On examining the body, and raising the omentum, no appearance of disease of any kind was found above a line connecting the anterior superior spinous processes of the ilia. Below this line there was intense peritonitis; the convolutions of the intestines covered with butter-like lymph, and the pelvis filled with pus-like fluid; the right ovary and broad ligament covered with the same butter-like lymph, but so feebly adherent that it washed away by dipping it in water; the cavity of the uterus was filled with bloody mucus. There was no other disease."

The uterus and appendages were examined by Dr. Oldham. The uterus had been opened by a single oblique division of the anterior wall, directed from the cervix to the left angle of the womb. The uterus was larger than usual for the virgin: it was rounded on its anterior surface, and a bulging convexity of the posterior wall, which, with the general softness of the tissue, showed it to have been the seat of recent engorgement.

The blood-vessels over the entire surface of the uterus and appendages were injected with blood, especially the fimbriated extremity of the tubes, the ovaries, the broad and round ligaments. On the anterior surface of the body of the uterus were two small projecting fibrous tumours, the size of a large and small pea; the serous investment of them was highly vascular, the blood-vessels rising over them just like the calyx of the ovarian ovum of the bird. There was a similar more flattened growth in the posterior wall.

The divided surface of the anterior wall showed its proper structure to be much enlarged (it measured in the body eight lines); the muscular structure was soft, and the veins large, a probe easily ran through them. The length of the united cavities was two inches and ten lines, the canal of the cervix being one inch five lines. The mucous membrane of the cavity of the body was soft, slightly raised, and of a vermilion hue. Agitation in the water was sufficient to loosen and separate it.

At the os uteri internum, there was a zone of highly-injected blood-vessels, broken only at one point; the circumference of
this aperture was eight lines. The os externum had a clean, smooth edge, without any break or mark of division; its circumference measured one inch one line. The cervix had its characteristic markings, and the glands were empty of mucus. On the right side of the divided cervix, which would have formed the front wall, the ribblings were stretched upwards, enlarging the mesh-like appearance; and, towards the os internum, some were lacerated transversely, and from this to the os externum the structure was more ragged than usual.

The right tube.—The extremity of this tube was almost entirely closed as a congenital formation, the aperture being very small. When opened, the fimbriated end showed its characteristic rich folds of mucous membrane, which were much injected, and were covered with bloody mucus. The remaining two-thirds of the tube was apparently healthy, not vascular, and pervious throughout.

The right ovary, which was almost covered with lymph, soft and large. There was a cyst large enough to hold a small nut on the uterine end of the ovary. The stroma was gorged with blood. There was only one puckered Graafian follicle; the surface of the ovary was thick and corrugated.

The left ovary was irregular in its shape, a projecting mammillary portion coming out from its outer end. This, on being cut into, was hard and vascular, like the commencement of malignant disease; the ovarian tunic was thick and wrinkled; the stroma vascular; a few remains of Graafian vesicles, with puckered tunics, and some clots of different colours, black and brownish.

The left tube vascular at its fimbriæ, healthy in its mucous membrane, and its canal pervious throughout. This tube passed into the uterus more directly than its fellow, which was more curved. The veins healthy; arteries healthy; the right round ligament large and vascular; vagina healthy.

It is unnecessary to comment at length upon this case. It affords a most instructive example of the dangerous effects of dilatation, even in experienced hands, and the great caution with which it should be undertaken. It is important, too, as showing the difficulty of detecting the cause of sterility. I am sure that there was no kind of morbid contraction in this case, and that the os and cervix uteri, which were alone treated, had nothing whatever to do with the dysmenorrhœa or sterility. Both of these, no doubt, were dependent on the atrophy of the ovary; and the congenital obliteration of the end of the right tube would have been sufficient to exclude the corresponding ovary from any share in the function of reproduction.

II. Another presumed cause of sterility and dysmenorrhœa
is any deviation in the position of the uterus, and hence an indication for the cure of these disorders is to replace this organ, and hold it in its proper axis in the pelvis, by means of Dr. Simpson's uterine supporter. Dr. Rigby and others have related cases of this kind. It is not necessary for me to reiterate the objections which I urged in the last number of the Reports upon this subject; but I cannot avoid relating the following case, which more than confirms my opinion of the dangers which may arise from this supporter. I am indebted to Mr. Bransby Cooper for this case, which, like the preceding one, ended fatally, and which he has given me his permission to publish:

A young married lady, of great personal attractions, was attended by Mr. Cooper for a very painful fissure in the anus, which he divided and speedily cured. She then spoke to him of what had been to her a very distressing social trouble, namely, her sterility, which she associated with a perfect indifference to sexual intercourse. Mr. Cooper examined the sexual organs; but, as he did not discover any defect which could be remedied by surgery, he referred her to a physician-accoucheur. This gentleman detected the uterus in a retroverted state, which he looked upon as the probable cause of the sterility. For the cure of this displacement, he introduced a uterine stem supporter, which set up peritonitis, of which she died in three days.

It is much to be lamented that the warning which such a case as this imperatively suggests should not have been published by the obstetric physician in whose practice it occurred. My own opinion is, that mere displacement forwards or backwards, if the uterus be not diseased, does not commonly cause sterility; and I cannot but characterize the practice of fixing the womb in a definite position by means of a stem supporter, as rash and hazardous, causing severe irritation and pain, and even death, to the patient, with, at the best, a very questionably amount of ultimate good. The anteversion or retroversion of a small uterus, without other complications, does not, in my experience, occasion any great distress; and it is far better to leave it alone, and improve its tissue with the rest of the organs of the body, than to prop it up for a time under the feeble pretence of curing it.

III. Dr. T. Smith's adventure of catheterizing the Fallopian tubes I know of only from his papers. I have the instrument by me, but at present I have no intention of using it.
Apoplexy of the South.—its pathology and treatment. By Samuel A. Cartwright, M. D. of New Orleans.—(N. O. Medical and Surgical Journal.)

The apoplectic treatment is the most successful in apoplexy, as met with in this valley; it is not a disease peculiar to any climate or season, as it occurs in all—the coldest and the hottest; being most rife in the greatest extremes of heat or cold, and excessive variations of the weather. The greatest number of cases occur at the summer solstice and at the equinoxes, in this country. In cold climates, it is not uncommon at the winter solstice. It would be a great mistake to suppose, that as apoplexy is found everywhere, and at all seasons, its treatment should everywhere be the same or even similar. Pathologists coincide in the opinion, that every form and variety of the disease is attended with more or less pressure on the brain, interrupting the functions of the life of relation, sensation, muscular motion and intelligence. In a cold climate, the repletion of the cerebral vessels is often due to a surplus of arterial blood, and to an excessive action of the heart and arteries. The respiration of a cold, dense atmosphere tends to give a greater preponderance to the arterial over the venous system. Whereas, in a hot, damp climate the reverse is the case; a hot rarified atmosphere tending to accumulate the blood in the venous system. The treatment recommended by practitioners in high latitudes, from Cullen down to the present day, in apoplexy attended with cerebral pressure from arterial repletion and increased arterial action, is not the most successful in that form of the disease attended with coldness, torpor, and plethora of the venous system: Indeed, the standard works of the present day, in the hands of the profession, although containing many valuable improvements, are calculated to do more harm than good, as far as apoplexy and some other important diseases are concerned, to that portion of their readers who practise in a climate the very opposite of that where the books are written and the observations made; because, by directing attention to the arterial system as the source of danger, the nervous, the digestive, the glandular, the venous and the respiratory systems are apt to be overlooked, or to have too little importance attached to them, in those complaints with us, where each is more implicated in the morbid actions than the heart and arteries. Apoplexy from venous repletion is noticed by the authorities, but many important pathological phenomena, which occur in other symptoms, both as causes and sequences of the venous repletion, are left unnoticed. The serous or bloody extravasations, sometimes found in the brain, are
only accessory; because, in many apoplectic subjects, no apparent lesion whatever is detected in that organ. The effusions found in the brain are mere effects of the cerebral congestion, and are nothing more than evidences of misdirected efforts of nature to relieve the hyperemia of the cerebral vessels. But there are other very striking phenomena witnessed in apoplexy, in this latitude, of another expedient adopted by nature to relieve the congestion of the brain, unnoticed by modern authors; consisting of copious exudations from the membrane lining the posterior nares, the tongue, cheeks, palate, uvula, pharynx, oesophagus, larynx, trachea, and the many cells, ducts and sinuosities into which the mucous tissue is reflected. In the healthy state, the pituitary portion of the membrane lining the internal nares, the maxillary, sphenoidal and frontal sinuses, and the ethmoid cells, throughout the greater part of its extent, is studded with glands and follicles, separating a mucilaginous lymph, called phlegm, or pituita, by the ancients; in apoplexy this fluid is poured out in much greater abundance than in health, and is more viscid and tenacious. Besides an increase of the mucosities, termed phlegm by the ancients, copious secretions or exudations take place from the glands and follicles, connected with the respiratory and digestive apparatus and its mucus lining; these mucosities are often so abundant as to impede respiration and obstruct deglutition.

The stertorous breathing is more the effect of collections of tenacious mucous, impeding respiration, than from paralysis of the muscles of the larynx, as has been supposed. This is proved by the fact, that the breathing ceases to be stertorous on its removal. As nature may be said to commit suicide in apoplexy, in relieving the cerebral hyperemia by an effusion of blood or serum, so also, she does the same thing in her efforts to remove the repletion by exciting so great a flow of mucosities from the glands and follicles in the vicinity of the congested brain, and from the membrane lining the air passages, as actually to obstruct respiration and hinder the transformation of venous into arterial blood, unless art be brought in aid, to clear those important avenues of the offending viscid fluids, by the proper apophagegmatric remedies. The abundance of mucosities blocking up those passages in apoplexy, is not a matter of speculation or conjecture—they can be seen and felt, and brought away, in the shape of tough, viscid ropes of agglutinated phlegm, by those measures and means called apophagegmatics. Paul of Agineta used a feather dipped in oil, to bring away the viscidities obstructing respiration, and assisted the removal with his fingers; as a preliminary measure to his ulterior treatment. Indeed, the viscid matter is often so tenacious as
to admit of being laid hold of, and much of it extracted by mere manipulations. The celebrated remedy for apoplexy of the Dominican friars of Rouen, called "Elixir Antapoplexia" was nothing more than a combination of powerful apophlegmatic ingredients, calculated to disembarrass the lining membrane of the trachea, larynx, fauces and posterior nares of the viscid mucus obstructing the air passages, and to excite the follicles, glands, and the membrane itself into active secretion, by direct medication to those surfaces on which many important nerves are expanded. The Friar's remedy won a high reputation for curing the disease; but not greater than its prototype, the veratrwm album, had won all over Southern Europe for curing the same complaint.

In the Augustan age, after four centuries of experience of the curative virtues of the veratrwm album, in the treatment of apoplexy, we find Celsus, (lib. iii, chap. xxvi,) recommending the same powerful apophlegmatic in the same disease, in conjunction with blood letting. The nauseous, bitter, acrid taste of the remedy, the burning sensation it occasions in the mouth and fauces, the tingling heat it excites in the nostrils, the nausea, vomiting and repeated retchings and the copious discharge of mucus attending its action, point it out as one of the most efficient apophlegmatics of the Materia Medica. The harshness of its action led Aretæus to substitute milder remedies to remove the obstructing mucosities. Subsequently, Fothergill introduced the use of the white vitriol, which he gave in doses of a scruple to half a drachm, to induce active vomiting—Sydenham, Pitcairn, and a great many eminent names in the profession, recommended emetics. A large portion of the physicians of Southern Europe viewed emetics, conjoined with pungent stimulating substances, almost as specifics in apoplexy. It was the high authority of Cullen, who discouraged the use of emetics and apophlegmatic remedies in the treatment of the disease. His objections were mostly theoretical, but as apoplexy, in the 56th parallel of latitude, is more owing to arterial excitement than to venous torpor, his objections may be founded on practical observations, applicable to the disease in Scotland, but wholly inapplicable in Greece, Rome and the United States. Cullen's theory and practice in apoplexy and Cullen's prejudices against emetics and apophlegmatics in its treatment, pervade the works of nearly all the medical writers who have since treated the subject.

The disease has been defined as a complete or partial suspension of the life of relation. The life of relation has two orders of functions, the one by which impressions from without reach the brain, the other by which the brain is exercised on
the body. Both these orders of functions are suspended more or less completely. The brain can neither act nor be acted upon, except in a very imperfect manner in the complaint under consideration. Animal life, or the life of relation, is a mere abstraction, a subtle spirit with a body, when viewed separately from vegetative or organic life, on which it rests as a basis. Organic life has also two orders of functions. The one to assimilate substances to its nourishment by the processes of digestion, respiration and secretion; the other to carry out of the body the particles, which have become effete or noxious to the economy, by the processes of absorption, exhalation and secretion. Both these orders of functions, in the healthy state, are equivalent to each other, and both require a proper degree of activity in the circulating system for their due performance. The cause of apoplexy must be looked for, not in animal life, but in the two orders of functions of organic life ceasing to be equivalent; in other words, in superabundant assimilation or in a defect of the excretory function. The first, constituting apoplexy from repletion of red and the latter of black blood, that connected with arterial reaction, as its most prominent feature, this, with venous congestion. When from defect of the secretory and excretory functions, as it generally is in warm weather and in warm climates, the safest and readiest method of cure is to awaken up all the absorbing, secretory and excretory organs from their torpor, into increased activity; particularly those glands and follicles in the immediate vicinity of the congested brain: the congestion itself, being the effect of the want of action in the excretory system. This is the method of cure, which nature points out, as is evidenced by the copious excretions of viscid mucus that occur during the apoplectic fit. So abundant is the excretion of mucus in the nares, saucos, trachea and æsophagus, as to require the assistance of art to expel it, or this very effort of cure would itself become the cause of death, by obstructing the due performance of the respiratory organs.

On the other hand, in that form of the disease arising from a surplus of assimilated matter, introduced into the system by vigorous digestive powers, in a cold bracing atmosphere, depletion of the sanguiferous system by blood letting, would strike directly at the root of the evil, and restore the balance between the assimilating and excretory functions, by unloading the blood vessels, diminishing the morbid heat and quieting the excessive arterial excitement. Whereas, in apoplexy from venous congestion, with coldness and torpor, much loss of blood, or, indeed any, in many cases, would diminish the force of the circulation too much to be compatible with secretion,
exhalation and absorption, these requiring so much activity in the circulatory system for their proper performance, as oftener to need stimulating substances, to excite that system, than the lancet to quell it. There is pressure on the brain in venous congestion, equally as in the other form of the disease from arterial fulness and reaction; but unloading the larger venous trunks will not unload the distention of the smaller vessels of the congested brain, where the danger lies, or do the good it does in the other form of the disease. Although blood letting is often serviceable, sooner or later, the main dependence is in giving energy to the absorbent, excretory and secretory actions, by addressing remedies directly to as large a surface of the sensative, nervous expansions as can be reached. Stimulating applications to the cutaneous surface, as mustard, for instance, to the extremities and over the epigastrium, have great power in awakening the torpid nervous system; yet they are feeble remedial agents in comparison to stimulating applications to the mucous surface. One of the most effective remedies for the latter purpose, is a combination of mustard flour, table salt, ipecac, and tincture of assafœtida. When patients are utterly unable to swallow water, or the most bland substance, the mere presence of this combination in contact with the nervous expansions in the mucous membrane (lining the mouth, tongue, palate, posterior nares and fauces,) will detach the viscid mucus, which is choking and suffocating the patient, restore diglutition and give free egress to the atmospheric air, so essential to the respiratory system, and to vitality itself. It not only detaches and throws off the viscid phlegm, already formed by that low grade of vital action, termed passive exudation, but by its stimulus on the net work of nerves, it brings to the rescue of the patient a higher grade of vital action in the absorbent and secretory organs of the digestive and respiratory apparatus; and thereby unloads as if by enchantment, the repletion of the smaller vessels compressing the brain. Even the regurgitation of this powerful apophlegmatic into the posterior nares, when it cannot be swallowed, is not without its benefit. Its direct application to the membranes on which the entire olfactory pair of nerves and some important branches of the fifth are distributed, is well calculated to make a strong impression upon the sensorium. On the tongue, it lies in contact with the expansions of the lingual branch of the fifth, the glrosso-pharyngeal portion of the eighth, and nearly the whole of the ninth pair. Deep in the throat, it comes in contact with the superior laryngeal and recurrent nerves, branches of the pneumo-gastric; awakening the torpid and paralyzed nervous system into life and promoting absorption, excretion
and secretion in the broad expansion of the mucous surfaces, and the subjacent, as well as the distant organs, subservient to the important processes of elimination. When it is remembered that a large portion of the mucous membrane acts as a kind of periosteum, on one of its faces to the bones of the head, and on the other as an eliminating surface, it can readily be perceived, how important the mucosities thrown off by it must be in diminishing the plethora of the cerebral vessels. In children, whose heads are large, the secretions and excretions thrown off from the lining membrane of the mouth, throat and nares are in much greater quantities than in the adult; thus proving the importance of such evacuations in preventing cerebral plethora, by an eliminating process or local depletion, constantly going on in the healthy state of childhood. In apoplexy, besides the beneficial efforts of the mere presence of apophlegmatics in contact with the mucous surface of the mouth and throat, further advantages are to be derived from their deglutition, in doses sufficient to cause vomiting. Indeed vomiting without reference to the substances exciting it, does some good, but much less than when the substance employed is both emetic and apophlegmatic. In substituting simple emetics, devoid of apophlegmatic properties, for such articles as the veratum album, possessing both properties in a high degree, the profession, instead of making progress, made a retrograde movement, and finally abandoned emetics almost entirely in the treatment of the disease. Some attention to the pathological phenomena observed in apoplexy and some other diseases, from venous congestion, will show the reason why apophlegmatic remedies cannot be dispensed with in their treatment. Observations prove that in such affections, the mucous membrane, even into the stomach, intestines, and lungs, is covered with mucosities of so tenacious a nature, as actually to form, over a great or less extent of its surface, an additional tunic, rendering the portion thus coated almost insensible to the ordinary medicines. In the lungs, the tenacious mucus obstructs the inflation of the cellular substance surrounding each of the extreme ramifications of the bronchial tubes, by stopping up the small air conduits, opening into the cells, and filling the cells themselves, which are lined by a delicate mucous tissue, with morbid exudations. In the human subject the bronchiæ end in cells exceedingly small, scarcely perceptible to the naked eye. In the alligator, however, Dr. Dowler's dissections (witnessed by the author) show that they are large bladders, equal in size to the urinary bladder of man. Their inflation brought the animal to life, after it had been apparently dead for nearly an hour, and the viscera of the thorax and abdomen had been laid
open to view by a careful dissection; so perfect was the restoration of vitality, from the simple process of inflating the air cells of the lungs, that the partially dissected carcass had to be tied with strong cords to prevent its doing mischief. On suspending the inflating process, the air cells become flacid, and a corresponding suspension of animation again occurred, and was again revived by renewing the inflation.

No better demonstration of the great importance of the free expansion of the air cells of the lungs with atmospheric air, could be desired. An emetic, or some remedy capable of dis-embarrassing the air cells, and the bronchial tubes opening into them, of all obstructing mucosities, must be of essential service in the treatment of such a formidable complaint as the one under consideration. But to derive much benefit from it, its action should extend further than a mere evacuation of the contents of the larger cavities; it should be capable of loosening and throwing off the tenacious phlegm coating the mucous surfaces, and filling the cells and smaller cavities. In other words, it should be apophtlematic, a remedy possessing the virtue of detaching and throwing off phlegm.

The preceding remarks have been deemed necessary to throw some light on the rationale of the treatment contained in the following abstract. The merits of the treatment do not, however, rest on the imperfect reasons above given in support of it. The theory may be ever so imperfect or erroneous, and the practice good. The latter was derived from the school of observation and experience; the former was subsequently prefixed to the practice, and not the practice to the theory. If it be not a satisfactory explanation, the merits of the practice remain the same, wanting nothing but a writer better able to elucidate and explain it. The truths of a long and extensive experience, in the treatment of apoplexy, as met with in this valley, declare the practice to be successful.

Col. Wiley P. Harris, some 20 years ago, in the hot weather of mid summer, fell in a deep apoplectic fit in the streets of Natchez, and was among the first triumphs of the practice in the author's hands—a practice which he had derived from the late Dr. J. A. McPheeters, who himself, recently died of the disease, but not under the treatment, which he himself had successfully used for 25 years in Natchez, and had previously been eminently successful in his hands in the same disease in St. Louis and vicinity. Thus proving, that the good results of the treatment are not confined to the southern portion of the Mississippi Valley. Dr. McPheeters never published his experience, and when stricken down by the disease himself, he derived no benefit from it, but was treated secundum
artem, as recommended by northern writers and teachers. In the hands of the author of this paper, the practice recommended in the following abstract, triumphed over a severe apoplectic attack in the person of the hero of Chapultepec and the first American governor of the city of Montezumas, Major Gen. John A. Quitman, long before he triumphed over the Mexicans. It cured the historian of the Mississippi Valley, Dr. J. W. Monett, of a severe attack, connected with hemiplegia. It cured both in a very short time. In Capt. Coarse's family, of Concordia, La., a case occurred, where the first immediate relief, from impending death, was procured by extracting the inspissated mucus, obstructing respiration, with the fingers. In the case of the commander of the Round Islanders, last summer, Col. W., who fell in his door, in this city, in a stertorous apoplectic fit, entirely insensible and motionless, strong and pungent apoplegmatic medicines, conjoined with a mercurial, (omitting emetic substances,) succeeded in effecting a prompt cure: camphor, assafetida, capsicum, quinine, laudanum and mercury, each in a full dose, were mixed together and inserted into the mouth. The combination was in part regurgitated into the nares; deglutition being impossible, until after the medicine had disencumbered the throat and fauces of the obstructing mucosities.

In this case, death was so close at hand, that the sphincters were relaxed. The emetic substances were omitted in consequence of the copious alvine evacuations. Recovery took place without bleeding, cupping, leeching, vomiting or purging, by the mere force of apophlegmatics, assisted only by the mercury to emulge the liver. The same happy result, from the same combination, used in the Col.'s case, (with the addition of blood-letting, after re-action took place,) was witnessed in a case of apoplexy, in a very large, plethoric lady, a native of the Sandwich Islands, in the prime of life, attacked in the very hottest weather of last July, in this city, at the Planter's Hotel.

These recent cases, with some others that might be mentioned, go to show that the virtues of the following treatment depend, probably, less upon the emesis occasioned by the remedies used, and more upon their simple apophlegmatic action, than was hiterto supposed. The treatment, however, is given, word for word, as originally written, a long time ago, but not until now published to the world.

TREATMENT OF APOPLEXY.—Two teaspoonsful of table salt, two teaspoonsful of mustard flour, one teaspoonful of ipecac, and one teaspoonful of tincture of assafcetida, in a tumbler of warm or cold water.
The more disgusting the medicine the better, because it loosens the tenacious phlegm adhering to the throat and air passages. The pungency of the mustard is all important for the same purpose. The throat is so choked up with mucus and phlegm, that the swallowing of anything is almost impossible. This mixture does great good without being swallowed. Its mere presence in the mouth and throat loosens the tenacious phlegm adhering to the fauces, causes it to pour out of the mouth, and arrests the stertorous breathing, caused by the phlegm in the throat, enables the patient to breathe easier, rouses him in some degree from the stupor, and enables him to swallow that, or other things. He had better swallow the mixture, however, until he vomits. It should be forced upon him until he does vomit, or act on the bowels. The whole tumbler full should be given in the space of ten or fifteen minutes, unless it vomits. A second tumbler full is sometimes necessary, but if it does not vomit, or cannot be got down, the white vitriol is the best remedy: a teaspoonful in a tumbler of water, half at one dose, and small portions afterwards. The salt, mustard, ipecac., etc., make the best remedy to begin with, because it is the best to loosen the phlegm, which is suffocating the patient; it should be forced into the throat, by prizing the mouth open with a spoon, and into this spoon the mixture should be poured by another spoon; when it falls down to the root of the tongue, it causes a heaving, strangling kind of motion to be made by the patient; then, he should be turned a little on his side, to enable the loosen phlegm to run out of the mouth, but soon replaced on his back again, with head a little elevated, to get more of the medicine. While this is doing, hot water, with mustard in it, should be poured, time after time, on his feet and hands, and a flannel shirt, wrung out of very hot water, doubled up in a large ball and wrapped in a dry flannel, should be applied over the stomach and bowels, and frequently renewed, as hot as the hands can bear it. A great deal of phlegm, a ropy white-of-egg looking substance, will be thrown up, and the patient will get relieved. Chamomile tea may be given to encourage the vomiting. If the head is hot and the face red, the head and face should be frequently wet with cold water. When the skin gets hot, and the pulse rises and face flushed, bleeding from the arm should be resorted to; but it is a very dangerous expedient in the opposite state of the system. After the vomiting, a twenty grain dose of calomel, floating on a spoonful of water, and a stimulating enema, to move the bowels, if they have not been already moved. The subsequent treatment consists of but little more than a light gruel diet, a little salts, and very small doses of sweet spirits of nitre, to act on the kidneys.
If the patient can be made to vomit, he almost invariably regains his faculties directly. Some physicians have theoretical fears of vomiting; it never does mischief to the head in any case, except where there is great heat of the whole surface, strong circulation and flushed face; and not then, if the head be wet before and at the time of vomiting. In the state just mentioned, bleeding and vomiting at the same time do well together. Prompt action is as necessary in this complaint, as in any other kind of strangling or suffocation. The means to be used should be well fixed in the mind before hand, and all the means mentioned should be made act together at the proper time—the vomiting, the hot applications to the extremities and stomach, and hot or cold to the head.

The Scrofulous Constitution—the signs by which it is known—the causes in which it originates—its effects upon families and individuals.—By Dr. King. (Prov. Med. Jour. Am. Jour. Med. Sciences.)

The scrofulous constitution may be called a defective and abnormal one, consisting in an imperfect state of the vital powers; "the principle of vitality" (whatever that is) causing an imperfect development of the physical structure, both in form and substance. There is an imperfect deposit of bony matter to form the skeleton, and too great a proportion of animal matter. The bones are therefore too soft to hold their contents, when that is required, as in the head; and too soft to support weight and endure force, when that is their office, as in the rest of the body, the spine, ribs, pelvis, and extremities. All the cartilaginous parts are increased in size: the extremities of the long bones are large and soft, and the interstices filled with serum and jelly instead of earthy matter: and the bones are either longer or shorter than the average.

The head bones being soft, give way to the pressure of the brain, which is affected more by the influence of gravity than its own vitality, and becomes misshapen. When fluid collects within, the shape is still more affected, and in those who recover, the disfigurement remains for life.

The malar bones are often too prominent, and the lower jaw too large: the palate is often imperfect, and the dentition is tardy, difficult and irritating: the teeth imperfectly formed, discoloured, friable, only one half enamelled, and readily decay: the two middle upper incisors are often unnaturally large and prominent; the upper lip partakes of the imperfection of the palate, and is often fissured. Frequently the ears are deficient,
the cochlea being wanting, and sometimes the internal meatus: the thorax is deficient in size and deformed in shape: the ribs bent in, the sternum protruding, and its divisions imperfectly united. The abdomen is too large and protuberant, from the flabbiness of internal parts and abnormal size of organs and mesenterical enlargement. The bones of the spine, partaking of the deficiency of earthy matter, particularly of the phosphates, are too soft to support the head and chest, and yield as well as their ligaments. The sacrum is often pushed towards the pubes, producing a narrow pelvis, and consequently in females, difficult or impossible parturition: the ilia are often twisted: the arms too long or too short for the body, the wrists too swollen, and the hands misshapen. The lower extremities are too long or too short, badly supporting the trunk: the knees larger, the bones badly fitted to each other, forming the knock-knee, or the reverse; the tibia, sometimes the femur, bending beneath its weight, and the feet splay-footed, or club-footed, in various degrees.

The soft parts partake of the same want of vitality. The brain is too large or too small, too soft, pulpy, and heavy in its functions, and liable to effusion from vascular debility: though sometimes its intellectual functions are more active than common, this being the exception, not the rule. The nerves are not so defective in carrying sensations or motions, as the brain is in its functions. The vascular system is generally relaxed and weak, and what used to be called (for want of a better theory) leucophlegmatic: the muscular fibre is weak and relaxed, and wanting in tone and vigour; the hair is generally of a light colour or reddish, and thin in texture, and scanty, and liable to fall off; independent of disease, from a low vitality: the eye has a peculiar expression, generally heavy, languid, inexpressive; whilst sometimes it has an animated expression of a peculiar kind, known to medical men, and may be called the scrofulous eye; at others, it foretells consumption, of itself. As a contrast to other signs of imperfection, the eyelashes are often long and beautiful. The stature varies from the dwarf to the apparent giant, when a boy may be six feet high at fifteen years of age; but such excess in height is never accompanied with corresponding muscular strength and well-developed limbs and features; they are always puerile and almost effeminate. The appearance of the child is often that of the little old man: while the appearance of the man is often that of youth and boyhood without its vigour. Sometimes the child is fresh and plump, with embonpoint, and to the artist beautiful; but this hypertrophy of the cellular membrane is delusive and morbid and often accompanied with organic infirmities, foretelling future disease.
The deposit of tuberculous matter, from imperfect assimilation, is one of the most obvious and leading effects of the scrofulous constitution, to which some writers have improperly confined their notion of scrofula. It is only one effect or disease among many which arises from a common constitution. Scrofula not only produces specific diseases, but modifies all which happen in the body in which it exists. Thus, hooping-cough, small-pox, measles, scarlet fever may be fatal in a scrofulous constitution, and harmless in an unscrofulous one.

The specific diseases to which the scrofulous diathesis gives rise, are hydrocephalus, tumours of the brain, tubercle, abscess, fungus, epilepsy, insanity, hysteria, amaurosis, cataract, deafness, otorrhoea, conjunctivitis, lippitudo, lupus, ozaena, coryza; tubercular glands in the neck; diseases of the heart and lungs, of the abdomen, oesophagus, stomach, bowels, pancreas, liver, kidneys, bladder, uterus, mesentery, scalp, skin, joints. Many forms of indigestion, dyspepsia, mal-assimilation, anorexia, general debility, want of tone and power, nervous debility without organic disease, are modifications of the scrofulous diathesis: so is gout.

Scrofula is supposed to affect one-fifth of mankind: of those who are born scrofulous, one-half perish in infancy; of scrofulous foetuses, one-quarter die in utero. Few scrofulous persons live to be married; this seems to be the provision of nature to get rid of the imperfect part of her works. Louis calls phthisis the most relentless enemy of the human race; but he forgets that it is the means of preserving purity of blood and vigour of constitution. Nature does not allow the direct transmission of scrofula to proceed, as a general rule, beyond three or four generations. It is then cut short by phthisis, or some other organic form of scrofula, or by abortion, or by non-conception. The following principles may be laid down, as true and fundamental in scrofula, the cases on which they are founded being omitted for brevity; but probably every medical man's experience will assent to their truth—

1. The grand source of the scrofulous constitution is the direct hereditary principle.

2. Scrofula is hereditary in collateral branches, when latent in the direct line.

3. When second marriages take place, if both parents are healthy, the children will be healthy; if either parent be scrofulous, the children will be scrofulous.

4. Persons who may have been scrofulous in youth may appear to have been cured, and to have grown into good health, but the constitutional taint remains, and the children will be scrofulous.
5. Phthisis is the most fatal form of the scrofulous constitution. Sydenham called it "scrofula of the lungs." Portal considered that congenital phthisis was scrofulous. Bayle and Laennec the same. All cachexia is a form of scrofula.

6. Scrofula and phthisis co-exist in the same family. More than half the scrofulous patients have parents or ancestors who died of phthisis. Of eighty-four cases of scrofula in the hospital of St. Louis, at Paris, more than half had phthisical parents; all the patients in that hospital who died of various forms of scrofula, had tubercles in the lungs.

7. Persons who are scrofulous in childhood sometimes become stronger after puberty; but the taint remains, and the children are scrofulous. The parents try to conceal the scrofula of their youth, which makes it difficult for the physician to trace the constitution of the child, unless he is clear in his general principles.

8. Parents who do not appear to be scrofulous themselves, but whose brothers or sisters are so, have scrofulous children. The family taint passes through them to the children. Thus, scrofula, like gout, is said sometimes to skip a generation. The scrofulous constitution may be originated independent of hereditary taint.

1. Syphilis is a cause of scrofula. Astruc says, when scrofula is not hereditary, it is invariably caused by syphilis. Scrofula attacked the nurse children (foundlings) of Montmorenci, in France; all the nurses had syphilis; as they were cured the children got well. Another originating cause of scrofula is excessive indulgence and abuse of the sexual instinct. The children of such parents are generally scrofulous. The parent verifies the expression in Job xx. 2, 11: "His bones are full of the sin of his youth." This power of early self-indulgence is one of the curses of hereditary wealth.

3. Another originating cause of scrofula is premature indulgence of the sexual instinct, and premature marriage. If the offspring are to be healthy, strong, and vigorous, no man ought to marry before the age of twenty-five, or woman before the age of twenty-two or twenty-three. The secretion of the seminal fluid, like all other secretions, must be subject to laws which decide its health and vigour. It should not take place too early or be too frequent, and it should be spontaneous—i.e. the natural result of a healthy organism, not of a mere mental action, or effort of imagination; there is a period of life during which these conditions are complied with, but before and after which they are not. The ancient Germans held it disgraceful to indulge the passion before the age of twenty. The laws of Moses contained particular restrictions on the subject; and it
is almost needless to state that the law of Christ inculcates purity of mind as the grand safeguard against the abuse of this faculty. If premature marriages have been preceded by indulgence, they are still more unfavourable to the offspring; and if by syphilis, still more so. The gradual extinction of the higher and aristocratical classes, by the want of direct heirs, is perhaps partly owing to these causes, engendering a scrofulous, and therefore perishable constitution. On the other hand, the lower classes marry early, not only from instinct, but also to obtain the services of a wife and companion; the physical strength has been deteriorated by low diet and hard labour, and the premature marriage completes the inability to produce a healthy, strong, and robust offspring. The labour of the peasantry is said to be two-thirds too much, and their food two-thirds too little; their food, clothing, and habitations are calculated to a minimum of sufficiency.

4. Another originating cause of scrofula is marriage too late in life. Debility in early life may, in some degree, be corrected; that of old age cannot. The generative power begins to decline about the age of forty-five. Those who marry late in life may have one or two children strong; but every child is weaker than the preceding one, and the youngest are the weakest. The child of the old man is become a proverb for visible debility stamped upon its physiognomy. Many of them die at birth. Some are precocious in childhood, and then suddenly fade and become effete and stunted, like the withering and dropping of fresh fruit in autumn; they are born out of due season. The period of weak fecundity in women commences about the age of forty. After this time pregnancy is often a delusion, or there is an imperfect conception or miscarriage, or the child perishes at birth, or, if reared, it is delicate and scrofulous. When marriage has not been followed by children till after several years, they are generally weak and scrofulous, agreeing with the age of the parents at the time of birth. Children born after the expectation of farther increase of family has ceased, are general scrofulous.

5. Another cause originating scrofula is disproportionate age and unequal vigour. When the father is younger than the mother, it may be a cause of scrofula. In all animals, power is the privilege of the male. The relative superiority of the man ought to be the foundation of marriage. Upon it depend all domestic felicity, and often its morality. The constitution of the children follows that of the father more than that of the mother. This is the law in the brute creation. The breeders of cattle set more value upon the male than the female.

6. Another originating cause of scrofula is paralysis, and also epilepsy, lunacy, and other diseases of the brain.
It may be observed that parents may be scrofulous without apparent signs; the scrofula may be latent, and the children scrofulous. Parents may show no signs of scrofula till after they have had children, when it may begin to appear. In this way it may be said to skip a generation, when it is latent. During the wars of the French Revolution, when the conscription was at its height, France was so depopulated that every man capable of bearing arms was enlisted, and even many who were incapable. None were left at home but the sick, the infirm and those who had married at nineteen or earlier, in order to avoid the conscription. Hence the population was kept up by persons too infirm and sickly for military service, and too young to produce strong children. Thus, at the Restoration in 1814, it was found difficult, out of a levy of 80,000 men, to find 25,000 to form a corps d'élite, and it was necessary for this purpose to lower the standard of height. After the peace of 1814, when the conscription was less rigorous, the men were more robust. But the conscripts of 1836 were an exception, for they were born in 1816, in which year nine-tenths of the population suffered severely from famine. These facts are obtained from the reports of the French Secretary at war. The end of marriage is domestic happiness, and the procreation of healthy children; and the former depends much upon the latter. The law is very particular about the forms of marriage, but very indifferent about the results. Rational marriages must rest with the parties themselves. Ignorance of the laws of constitutional health is one great cause of irrational marriages. The great motives to marriage are rank, property, fancy; to these ought to be added, morals, intellect, health, which are more important for happiness. The moralist has hitherto been too little of a physiologist. Physiology is the basis of morals as well as of health. The educator ought to be a physiologist as well as a moralist. It is only by the union of the two that the young can be judiciously trained, and prepared for real life. However persons may despise physiological warnings before marriage, they are too sensible of their value afterwards. Constitutional diseases not only produce unhealthy children, but often also disgust, aversion, and misery between the parties themselves. Marriage will not strengthen a weak constitution, as some suppose, but debilitate it still more. It is a common observation of females, "I have never been well since I married." Child-bearing and nursing demand more than a delicate and tainted constitution can bear. The strength gives way under the heat and burden of the day.

I have thus endeavored, though too briefly for the importance of the subject, to trace the history of the scrofulous constitution
in its hereditary principles, direct and indirect, proximate and remote. Where it exists, it cannot be entirely eradicated. Where it does not exist, it may be originated by the vices and follies of men. I have considered it as the source of many diseases not hitherto attributed to it; and that its best antidote would be a judicious education and training upon physiological principles. These principles it is the aim and merit of medicine to diffuse among society. The medical voice reaches the highest and lowest ranks. Her useful and practical truths are of daily application, and daily disseminated by her faithful disciples, who in the lower walks of the profession, ever ready by day or night at the call of distress, find their chief and often their only reward in the conscious exercise of the duties of humanity, the mens sibi conscia recti. Finally, the greatest compliment which has yet been paid to the medical profession, and its humane and scientific principles, is to see the whole legislature, and every populous city in the kingdom, resolve to adopt them as a basis of civil polity, and to carry them out for the health, benefit, and happiness, of the poorest and largest class of our fellow-creatures.

Cases of Permanent Stricture of the Urethra, cured by Cutting.
By James Bryan, M. D., of Philadelphia, Professor of Surgery in Geneva Medical College, N. Y.—(N. Y. Jour. Med.)

It is well known, that the common modes (dilatation and caustic) of treating permanent strictures, are to the last degree unsatisfactory. Patients are relieved temporarily by the forcible introduction of bougies, especially conical ones; by the judicious use of caustic, &c., but the disease generally remains, and the patient either returns to the surgeon, or goes to another for further temporary relief. Years pass on, and the stricture becomes gradually worse, until the patient, especially in cold weather, is in daily danger of a rupture of the bladder, from retention of the urine, and the impossibility of passing any instrument through the urethra into the bladder. In other cases, the patient is doomed to carry with him at all times, a number of bougies and catheters of "assorted sizes," in order to relieve himself under the almost certain emergency. I cannot, perhaps, better detail my mode of treating these hard cases, than by referring to one which came under my care several years ago, with three others which followed. It was that of Mr. S., a young married man, who had for nine years suffered from stricture in its worst form. We had gone through the usual dilating and caustic treatment, with temporary relief
from time to time, until the canal had, as far as the introduction of any instrument went, entirely closed. A very small stream, or rather dropping of urine, which of course demanded a long time to evacuate the bladder, was the extent of his power of urination. He had in fact, several times been in danger of rupture of the bladder from retention. Having tried a large number of our most respectable surgeons without permanent benefit, he despaired of relief. On examination I could distinctly perceive from without, commencing about 5½ inches from the mouth of the urethra a large cartilaginous stricture, which seemed to extend 1½ or 2 inches along the passage. On reflection, I came to the conclusion that nothing but a complete division of the strictured part would be of any avail. I called upon our surgical instrument makers, but found nothing that I could use, but got Mr. Shively to make me a flexible metallic catheter, with a stylet, on the distant end of which was fixed a blade. With this instrument (a full account of which will be found in the Medical Examiner of 1847), I succeeded in a few sittings in entirely dividing the stricture; since when, he has had no difficulty in urination or symptoms of the disease. The following cases have occurred since that time.

Mr. B., a respectable merchant, from a town in the western part of New-York, came to Geneva, while I was lecturing there on surgery; and consulted me about his case. In my notes, I find that he applied on the 15th of June, 1849. The stricture was of 12 years' standing. He had consulted many eminent surgeons in the state and city of New-York; had had caustic, dilatation and scarifications tried. In reference to the latter mode of treatment, my opinion is that, at best, in the cartilaginous form of the disease, they can but palliate. Mr. B. supposes there are two strictures, one 5½ inches, and the other 7 from the mouth of the urethra.

June 16th.—On examination, I find that the first stricture is cartilaginous, and at least an inch long. The second is longer, and in the membranous portion of the passage. Two incisions were made to-day; one at 12½ o'clock, and the other at 3½ P. M. The instrument advanced more than a quarter of an inch; the stricture, after the incision, was distinctly felt to give way before the point of the instrument.

17th.—Two incisions have been made to-day; one at 9, and the second at 3 o'clock. Mr. B. says that no blood followed the first incision yesterday, and only a few drops after the second. That the stream of urine is much freer and larger. This morning's operation excited a little pain, and produced a little blood. The afternoon's incision was followed by about fifteen drops of blood, but very little pain, and an advance of the instrument of about one inch.
18th.—One incision—a few drops of blood—no pain.

20th.—The bougie passes one and a half inch further. The first stricture is fully divided and passed. Some soreness, and a little pus—to apply cold water to the perineum, and take a dose of salts. A good stream of urine.

22d.—Quite comfortable; no discharge of blood or pus; continual rest and low diet.

26th.—Made an incision, and gained an advance of one-quarter of an inch on the last.

27th.—Advanced another quarter of an inch after an incision.

28th.—Made another incision, which was repeated on the 29th and 30th, when the passage was clear to the mouth of the bladder—no difficulty in inducing an ordinary sized catheter.

Having left Geneva the next day, I became anxious to hear from my patient, but did not until one day last week—November 23d. The treatment was successful, and a gentleman from a neighboring district, who has suffered the disease about three years, has just been treated in the same way, and discharged. The gentleman came to Philadelphia to consult me.

Nov. 19th, 1849.—Mr. P., aged 23. This stricture was passable with a small conical bougie, and was located a little beyond the curve of the urethra. An incision was made, and a free cathartic recommended.

20th.—A little soreness on passing a small metallic sound at the point where the incision was made.

21st.—An incision made; the instrument advancing about half an inch beyond the first point.

22d.—No incision—thinks the urine flows better than it has for years.

23d.—Cut gained an inch. The operation was repeated on the 24th and 25th, when the passage was perfectly clear. A large sized metallic catheter passes readily to the bladder. The patient remained a few days longer, taking cathartics several times during the treatment, and living on a vegetable diet. He was perfectly relieved, and I hope cured.

Case 3.—Mr. I., from Georgia, æt. 35, with a stricture of nine years’ standing, having used bougies and caustic again and again, came to consult me. The first incision was made October 22d, and repeated five times, the instrument each time advancing from one-eighth to a quarter of an inch.

No other treatment was resorted to. Only a few drops of blood were lost and the stream of urine was restored to its natural size. A full sized bougie can be introduced with the greatest facility. The particulars of this case are so much like those of the first, that it is needless to repeat them.
It will be remembered that Civiale has adopted the cutting mode of treating stricture, but that a fatal objection lies against his instrument, inasmuch as, like those of Amusat and Lallemand, it must pass the stricture before it can be made to operate, and then only scarifies. He tells us that he has long been in the habit of cutting through strictures near the mouth of the urethra, and that now he cuts them beyond the curve. Mercier's ideas, in our opinion, are the nearest correct; viz., that the stricture must be entirely divided, in each direction.

I think that the use of bougies and dilators of any kind are prejudicial, and tend to develop strictures rather than cure them. I recommend no dilatation after cutting, but rely upon the urine itself keeping the incisions open, and the sides of the stricture from adhering.

PART III.

Monthly Periscope.

Movements of the Respiratory Organs in Disease.—(Prov. Med. and Surg. Jour. American Journal.)—Dr. Sibson gave an account, illustrated by diagrams, at the meeting of the South-Eastern Branch of the "Provincial Med. and Surg. Association," in July last, of his investigation into the movements of the respiratory organs in disease:

In health, the inspiratory movement of the walls of the chest, during tranquil breathing, is only from two to six hundredths of an inch; while that of the abdomen is about three-tenths of an inch.

During a deep inspiration, the expansive motion of the walls of the chest is, in front, about one inch; and at the side, about-two thirds of an inch; and that of the abdomen is about one inch.

The expansion of the two sides of the chest is nearly equal; the left side does not, however, expand quite so much as the right side, over the lower two thirds of the chest, owing to the position of the heart.

In those cases in which there is great obstruction to the entrance of air, during inspiration, through the outer air passages, as in cases of extreme narrowing of the larynx or trachea, the walls of the chest, to a greater or less extent in proportion to the obstruction, instead of advancing during inspiration, actually fall backwards. The cause of this remarkable phenomenon is evident: the diaphragm acts with great power, and lengthens the lung, and, as air can only rush into the lengthened lung through the larynx, with great difficulty, the lungs collapse, just as a half-filled bladder collapses when it is lengthened, and the pressure of the atmosphere forces backwards the anterior walls of the chest.

In emphysema and bronchitis, in those cases where there is an
obstruction to the entrance of air into the air-cells through the smaller air tubes, the lower end of the sternum and the adjoining cartilages fall backwards during inspiration, while the upper part of the chest, expands, and the diaphragm descends with great power.

In pleuritis, with pleuritic effusion, the inspiratory expansion of the whole of the affected side of the chest is diminished, abolished, or, in some cases, even reverse, while that of the opposite side is throughout exaggerated. The inspiratory motion of the abdomen is also lessened or abolished in the affected side, while on the opposite side it is increased.

When the whole of the lung is consolidated from gray hepatization, or tuberculous deposit, or condensed from firm tendinous adhesions following pleuritis, then the expansion of the whole of the affected side is diminished, arrested, or reversed; while that of the healthy side is exaggerated.

When the upper lobe is affected with phthisis, or pneumonia, or any other local disease, the expansion of that lobe is interfered with, and the inspiratory motion of the ribs over the affected lobe is diminished; while that of the ribs over the opposite lobe is usually increased.

It is not, however, alone in diseases of the upper lobe, that the motion of the ribs over that lobe, namely, the five superior ribs, is diminished, as the respiratory motion is lessened, or even arrested, when those ribs are injured or diseased, or when the intercostal muscles moving them are inflamed, or affected with pleurodynia, or when the motion of those ribs would produce pain or injury in the adjoining scapula, shoulder joint, or arm, when they are injured or inflamed.

When the lower lobe is the seat of pneumonia, or any other disease, the motion of the ribs over that lobe is usually, but not in every case, diminished; and the motion of the abdomen just below the ribs, on the affected side, is always diminished in these cases.

When the heart is enlarged, and still more when it is adherent, there is diminished motion of all the ribs on the left side, with the exception usually of the second and third. "If there be pericarditis, the motion is still more interfered with, and the motion of the abdomen just below the xiphoid cartilage is also much affected, being in all cases lessened, and, in some extreme cases, quite interrupted. While the motion of the centre of the abdomen is diminished, that of the abdominal walls at each side is usually not affected.

In peritonitis, if the disease be general, the abdominal motion is universally diminished; if it be partial, the diminution of respiratory motion is most marked over the immediate seat of the inflammation.

Dr. Sibson concluded by calling attention to the value of the signs afforded by the modification of the respiratory movements in disease, and to the aid which those signs give in arriving at an accurate diagnosis. The nature of the disease cannot be detected by the observation of the signs just indicated; but its seat is at once pointed out. In those persons who are really healthy, but who imagine themselves to be the subjects of chest-disease, the observation of the movements
of respiration will almost always give the satisfactory, conclusive, and very comfortable knowledge, that the chest is healthy.

In general, the information as to the respiratory movements afforded by touch and sight is quite sufficient, but, in cases of difficulty, the observations may be rendered minute and accurate by the aid of the chest measurer.

On the Comparative Pathology of the Different Races of Men. (Annales d'Hygiène. Med. Chir. Rev.)—M. Boudin has for some considerable time been engaged in furnishing statistical proof of the erroneousness of the doctrines of acclimatization, which suppose that long residence habituates men to climates otherwise unfitted for them. He has brought forward, in his various communications, of which this forms one, ample proof of the little success and the great mortality that have attended the attempts at the colonization of Algeria. In the same way, the European has always failed in fixing himself in Egypt, and the French cannot propagate their race in Corsica. He pays a well-deserved compliment to the British government for having availed itself of a knowledge of these deleterious influences, in the more judicious distribution of its troops in recent times. Thus, by adding to the British troops auxiliaries recruited among races whose physiological and political aptitudes suited them to the respective climates, by selecting for the European troops serving in warm climates the most elevated regions, and by shortening the time of service abroad, it has effected a remarkable diminution of mortality—a diminution which, in the most unhealthy possessions, has amounted even to fifty per cent. He contrasts this with the large mortality which still prevails among the French troops serving in analogous regions. The differences of the comparative mortality of the different races placed under different circumstances, is seen by examining that of the white and the negro population. Thus, while at Philadelphia the mortality of the whites is 24 per 1000, that of the negroes is 47; that of the whites 10 years old and upwards being, at New York, 15 per 1000, that of the negroes 26. At the Eastern Penitentiary, 20 per 1000 whites and 70 blacks die; while at Weathersfield, the numbers are 28 and 100 respectively; and the same enormous disproportion is observed in other prisons. The great mortality is especially due in the negro tribes to phthisis and typhus; while the negro is so proof against malaria, which carries off so many whites, that a due observation of this fact has enabled the British government to diminish wonderfully the mortality of their troops employed in the East and West Indies. In the West Indies, the mortality of the negro soldier, compared to the white one, is but as 40 to 78 per 1000; and in Sierra Leone, it is 16 times less than that of the white. The latter are 160 times more fatally affected by fevers than the negro; and it is only in diseases of the chest that they enjoy a somewhat greater immunity (4.9 to 6.3 per 1000). Even in the most southern station in Europe, Gibraltar, however, the negro mortality (62) greatly exceeds that of the white soldiers (21.4), though these are also strangers to the soil—the diseases of the chest in the negro amounting to 43 per 1000.
In respect to the Sepoys, their mortality, at the different stations, is three or four times less than that of the English soldier; and they enjoy a remarkable immunity from diseases of the chest and liver, but are more prone to dropsies, owing to the endemic prevalence of the beriberi. The mortality of the Hottentot soldier at the Cape is very small, half of the deaths arising from diseases of the digestive organs. They, too, are more prone to diseases of the chest than the white soldier. Many facts tend to show that the Jews, even amidst wide-spreadig pestilences, have enjoyed great immunities; and that they pre-eminently possess the power of acclimatization.

M. Boudin concludes the present paper with some observations on the diseases and mortality of the war-horse. In 1845, of an effective force of 33,618 horses, the French cavalry lost by death 2603, and by discharge 2511. Of an effective force of 41,793, in 1846, 2679 died, and 3314 were discharged. While the general loss by death and dismissal, in France, was 143 per 1000, it was in Algeria 240. In 1836, the mean annual mortality was 197 per 1000; 126 in 1841; 108 in 1842; 71 in 1843; 76 in 1844; 77 in 1845; and 66 in 1846—a diminution constituting one of the greatest triumphs achieved by the application of sound hygienic and administrative measures. How much yet remains to be done, however, is shown by the fact that the Prussian cavalry only loses 20 per 1000, and the French gendarmerie 14 per 1000. The largest mortality takes place in the finest quarter of the year—from April to October; while the smallest corresponds to the cold season of the year—a fact chiefly attributable to the suspension of manœuvres during the latter period. The most frequent causes of death, both in France and Algeria, are glanders and dis- eases of the respiratory organs. The glanders gives rise to ten times the mortality in Algeria to that produced in France—a difference, M. Boudin thinks, that may be in part explained by the fact of so many mules (5695, in a force of 15,538) being employed in the former country—the disease almost always attacking these animals in the acute form. In 1846, the Minister of War consulted 136 army veterinary surgeons, as to whether this disease is contagious. No answer was returned by 12; 24 were uncertain; 36 were non-contagionists; and 64 contagionists.

Cases of Inveterate Sciatica, treated by the actual cautery. By Dr. Payan, of Aix. (Gaz. Médicale.)—Case I. A plasterer, 34 years of age, was admitted to the Hotel-Dieu of Aix, affected with sciatica of 15 years standing. Bearing his pain with great fortitude, he had but seldom been compelled to relinquish his avocation. The attack which brought him to the hospital was, however, more severe than heretofore, and had now lasted six months. Most of the usual remedies had been tried without success. During the day the limb would be pain-ful and benumbed, but during the night the pain would become in- tense and lacerating, extending along the entire course of the nerve
and its subdivisions, but especially behind the trochanter, in the ham, and upon the dorsum of the foot. Fifty leeches were twice applied, followed by turpentine enemata, and blisters and morphine to the denuded surface. The patient was so far relieved as to be able to resume his occupations in 18 days. The pains, however, very soon returned with increased intensity, and the patient returned to the hospital. Two moxas applied along the course of the nerve near the trochanter, and frictions with anodyne liniments produced some relief, yet the pain in the hip and back of the leg remained undiminished. M. Payan now applied the cautery with a white heat (about 3 centimetres long) between the metatarsal bones sustaining the little toe and that next to it. The relief was complete. The patient slept well the following night and experienced no more pain whatever. The burn healed in 28 days. The patient has been frequently seen since and continues perfectly well. The case was treated towards the close of 1847.

Case II. A man 45 years of age, had suffered with sciatica six years, when (in 1848) the pain being increased, he consulted M. Payan. The pain was located principally along the nerve and its branches, from the hip to the toes. Cauterization was made between the metatarsal bones (as in the above case), the wound healed in 31 days, and the cure was complete. The patient had suffered no return 18 months after the treatment.

Case III. This patient, aged 46 years, had suffered with sciatica five years. M. Payan saw him on the 22d Nov., 1848, in an attack of 10 days standing. The pain was seated in the left thigh and leg. 40 leeches were applied behind the trochanter and morphine administered, with slight relief, which soon subsided. On the 24th Nov., the sufferings were as great as ever. Cauterization was now resorted to as in the above cases. The pains ceased on the instant of its application, and had not returned a year after the treatment. This was 35 days in healing.

Case IV. A female, aged 35 years, entered the hospital the 6th Nov., 1848, with sciatica of the left limb, which had existed since the January preceding. The pain was felt principally along the external and posterior surface of the leg, and extended to the toes. Although somewhat relieved by blisters, it was still very intense. Cauterization between the metatarsal bones was here also completely successful.

It remains to be determined whether a similar treatment would be successful in cases in which the pain did not extend to the foot or toes.
Treatment of Insanity. (Gaz. Médicale.)—M. Brière-de-Boismont, of Paris, manager of the Insane Asylum, has just published a memoir the object of which is to demonstrate from clinical observations, that all varieties of acute insanity and mania may be cured, in from one to two weeks, by the use of protracted baths and continued irrigations.

On Nervous or Convulsive Cough. By M. Sandras. (Bulletin de Thér. Med. Chir. Rev.)—There are several species of this: 1. The patient can receive no physical or moral impression, without suffering from a cough almost convulsive in its character. In examining the chest of such a person, the physician may be led into grievous error, and the unnecessary fear of incipient phthisis, unless he examines it on various occasions and under different circumstances. Patients with incipient phthisis also cough from the slightest cause; but it will be generally found that in those cases the impression is physical, while in those we are alluding to it is oftener moral.

2. Another form of cough, having some analogy to this, is observed whenever certain functions are brought into play, or when they are more actively exerted than usual. Thus, it is found in some whose meals have been too long delayed; in others, as soon as they have eaten, especially if rather fully. Other persons cannot take a little extra-muscular exertion without bringing on a tormenting cough of this kind. In both this and the preceding form, the cough is dry and capricious, exhibiting very inconstant physical signs; but this latter form is somewhat more fixed in character than the first, inasmuch as, in the same person, it is always when the same function is fulfilled that it is produced; and it seems, too, to be more dependent upon disorder of the organs in connection with the exercise of whose functions it appears; and this should be our chief guide for its treatment.

3. Another cough is observed upon the slightest irritation of the bronchi being produced; so that the least cold brings on a convulsive cough nearly as bad as that of pertussis. Sometimes, and especially in children and very young adults, it takes on this form at the very commencement of the cold, and retains it until coction is produced. Each paroxysm is accompanied by a dry, raucous sound, and attempts at vomiting. Sometimes it is periodical, the disease only gradually assuming the characters of an ordinary ripening catarrh. In other cases, the spasmodic character is only observed as the cough is drawing towards an end. Instead, however, of coction taking place, the expectoration continues frothy and transparent, and is only ejected by convulsive efforts and vomiting—the paroxysm being brought on by the slightest cause, and a state of spasmodic suffocation being almost induced, until a little transparent and frothy matter is expectorated, when all becomes quiet and normal until a new paroxysm. In some cases, the cough suddenly ceases, without the expectoration having undergone any change; but this is rare. The causes of this pertussoid cough are not of easy appreciation. At the commencement, all is like a common cold; and it is the reiterated catching cold in an
eminentely neuropathic subject that seems to induce the aggravation. The prognosis, as regards immediate danger, is favourable; but is more serious in respect to future consequences, owing to the various evil consequences which may ensue upon the congestions the paroxysms give rise to. The destruction of sleep and disturbance of digestion which it causes are other important circumstances. Among the more serious results, is the production of hernias and emphysema pulmonum. The irritation of the glottis and larynx should be relieved by tepid aqueous or narcotic vapours, and by the use of demulcent emulsions with laurel-water. When the expectoration is difficult, syrup of poppies, with small doses of tartar emetic, should be given, the antimony, whether it causes vomiting or not, affording great relief. So, too, small doses of extract of belladonna every night, or night and morning, should be given when the expectoration is somewhat modified, and in a few days the convulsive character of the cough usually abates. When this drug disagrees with the patient, it should be used endermically.

4. This variety may be called hysterical, from its occurring in hysterical patients. In a subject whose respiratory organs are habitually in a good condition, all at once an irregularly paroxysmal cough comes on, occurring at frequent intervals, and sometimes almost without intermission. It does not terminate with the expulsion of mucosities, but is either dry and objectless, or is accompanied by a true phlegmorrhagia. Hysterical phenomena sometimes precede or accompany the cough; while at others it ceases instantly that these appear. The cough is found to get worse and worse, in proportion to the development of the hysteria; and this without any physical explanation of its intensity. The pulse is not febrile, but may be irregular, and such a one as is found in nervous subjects. The prognosis is favourable, unless the cough is mistaken for a phlegmasia, and aggravated by maltreatment. The treatment is, in fact, that which is proper for hysteria; but two means are especially indicated—the use of belladonna, and the employment of baths. Belladonna, given in doses of one-seventh of a grain every half hour, is highly efficacious; and it is rare for five or six doses to be given before improvement is visible. Baths at from 84° to 89° act as if by enchantment; but sometimes it is useful to give them at from 75° to 82°; and this is the temperature which will in most cases prove the best, after the patient has already employed the higher.

Treatment of Nervous Cough with a gargarism of Sal. Ammoniaci and Spirits of Mindererus. (Annales Soc. Med. d’Emulation. Jour. des Con. Med. Chir.)—At the close of catarrhal affections, and especially of the grippe, there is often a dry and purely nervous cough, excited by a tickling sensation in the larynx or throat. This cough, in some instances, ceases for a time, but soon returns with increased intensity. In such cases, Loeffler advises the frequent application of gargles of
sal. ammoniac dissolved in spirits of mindererus, as a very successful treatment. Its efficacy was exhibited in the case of a young man, who, at the close of an intense bronchitis, was troubled with a dry, fatiguing cough, which resisted both narcotics and derivatives. The gargarism of Loeffler, with the addition of laudanum, in two days removed this cough which had continued for three weeks. The following is the formula:

B & Distilled water, . . . . 360 grammes.
Hydro-chlorate of Ammoniac. 15 "
Spirits of Mindererus, . . . . 24 "
Sydenham’s Laudanum, . . . . 12 "
Syrup of Diacodium, . . . . 30 "

Make a gargarism.

Conclusions in relation to Angina Pectoris. By Samuel Kneeland, Jr. (Amer. Jour. Med. Sciences.)—1. From the symptoms and morbid appearances, angina pectoris is not a disease of the lungs, heart and its vessels, or stomach; but an affection of the nerves supplying these organs.

2. Anatomy, physiology, and pathology would lead us to place the seat of angina pectoris in the par vagum, and not in the sympathetic system of nerves.

3. Like other nerves, the par vagum may be affected with neuralgia and rheumatism; with inflammation; it may be compressed by morbid growths; its spinal origin may be compressed by hemorrhage, accidental wounds, and various irritations—all of which may cause the symptoms of angina pectoris.

4. Angina pectoris and asthma are intimately related; the former being an affection more especially of the sensitive filaments of the par vagum; and the latter an affection of its motor filaments. Both are generally more or less combined in the same case.

5. Angina pectoris is a disease not necessarily fatal, especially in young persons, if accurately diagnosed, and properly treated.

6. In addition to the remedies of the books, special attention should be given to the inhalation of oxygen, and to the use of electricity.

7. In cases of angina pectoris, attention should be directed to the examination of the par vagum, from its origin to its terminations, which, doubtless, on careful examination, will exhibit lesions sufficient to account for a fatal result.

Chronic Articular Rheumatism treated with Applications of the Tincture of Iodine. (Theses de Strasbourg. Bulletin-Gén. de Thér-ap.)—M. M. Held and Gros, have called the attention of physicians to the beneficial effects of the application of tincture of iodine to the affected joints in all stages of chronic rheumatism. The tincture they employ
contains one part of Iodine, to ten parts of Alcohol at 33°. They report a number of cases in which this treatment was most beneficial. They state that the local action of the Iodine much resembles that of vesicatories, tartar emetic, or nitrate of silver. It seems to act on several elements of the articular affection; it promptly mitigates the pain and hastens the absorption of the fluids effused into the articulation, or infiltrated into the adjacent tissues. Moreover this application produces no pain, but only a slight sense of warmth in the parts upon which it is made. The first applications sometimes produce some sensation of the integuments, which causes a merely temporary inconvenience. In some few subjects, vesicles similar to those produced by blisters follow the application of the Iodine, but in no instance is there any considerable inflammation of the skin, or erysipelas. The tincture as applied by wetting with the tincture of Iodine a pretty long compress, which is to be wrapped around the diseased joint, and secured by a bandage. The application should be renewed night and morning. When the skin is very delicate and is vesicated, the tincture should be diluted with water, or the application suspended.

**Chronic Tonsillitis.** (Allg. Med. Central Zeitung. Journ. des Con. Méd. Chir.)—Dr. Schallenburg recommends that chronic tonsillar angina should be treated with the application of a tartar emetic plaster between the shoulders. The pustular eruption usually manifests itself in forty-eight hours, at which time the inflammatory symptoms will be found to have diminished. Dr. S. states that he has had many opportunities for demonstrating the value of this treatment, both on himself and on other persons.

**Cure of Hydrophobia.** (London Lancet.)—M. Rocher d'Héricourt, who has lately returned from a journey to Abyssinia, has brought with him manuscripts of great literary value, and has collected all the facts calculated to throw light on geology, mineralogy, botany, and other branches of science. He has likewise brought with him numerous specimens of a plant, the root of which, reduced to powder, is a cure for hydrophobia, both in men and animals. Of its virtues M. d'Héricourt had practical proofs. Four dogs and a man having been bitten by a mad dog, they were, by the application of this remedy, cured of the hydrophobia which ensued; whilst the fourth dog, (bitten at the same time, by the same animal,) to which the remedy was not applied, perished in all the agony of that terrible disease. The virtue of the plant, and the manner of preparing it for use, were explained to the traveller by a potentate of the country, who assured him that it was there generally used, and never failed. The specimens brought over by M. d'Héricourt have been submitted to the Academy of
Means of arresting the fatal effects of Chloroform.—In an article published in the Bulletin Général de Thérapeutique, M. Ricord reports two cases in which the apparently fatal effects of the inhalation of chloroform were remedied by a very simple process. The first case was that of a woman from whom some small vegetations were to be removed. She breathed the chloroform from a sponge, and its anesthetic effects were rapidly produced. Scarce had a cut or two been made with the scissors, before M. Ricord's assistant informed him that the pulse was extinct. In fact, the pulsations of the heart had ceased, the lips were livid, the limbs completely relaxed, and the face presented the cadaverous aspect that is the precursor of death. The ordinary treatment was promptly resorted to, but without effect. M. Ricord then applied his mouth to that of the patient, and insufflated the lungs. After a few insufflations, the patient sighed, the chest began to dilate, the visage to resume its natural hue; the heart and pulse began to beat in an appreciable manner, and the eyes opened. In another case, that of a man who was about to undergo circumcision, the same alarming symptoms were produced, and were promptly removed by the same means.

Since the publication of M. Ricord's cases, M. Escallier, in the Revue Medico-Chirurgicale, reports two cases, in which apparently fatal consequences followed the use of the chloroform, employed to facilitate the reduction of hernia. In one case, the chloroform was inhaled from a sponge for three minutes, at which time the pulse and respiration had entirely ceased. Cold water, titillations of the nostrils, and ammonia, were tried without effect. M. Escallier then thrust two of his fingers deep into the throat, even to the openings of the larynx and oesophagus. Immediately a movement of expiration announced a restoration of vitality. In the second case, the chloroform was respired from a fine handkerchief for about five minutes, when the appearances presented by the patient induced M. Escallier and his assistants to suppose that death had actually occurred. Two fingers were at once thrust as deeply into the throat as possible, and suffered to remain there about a minute, when a strong expiration took place, and the patient was restored.

A writer in the Boston Medical and Surgical Journal, H. G. Luther, dentist, reports a case in which electricity very promptly relieved a female in whom chloroform had produced a most alarming prostration of the vital powers.
On the Therapeutic Properties of Belladonna. By Dr. Debreyne. The Journal des Connaissances Médico-Chirurgicale for the 1st December, 1849, contains a lengthy letter from Dr. Debreyne on the therapeutic properties of the belladonna, in which he speaks most favorably of its effects in several diseases. He states that he has employed this remedy almost daily since 1815. We propose to give a brief abstract of his letter.

Hooping Cough.—Dr. D. states that he has employed the belladonna in hooping cough with great success, especially in a fatal epidemic which prevailed in 1817 and 1818, at Mortagne (Orne) and its environs. The dose was generally governed by the age of the child. One grain for every month of the patient's age was given in the course of twelve days, which was the ordinary duration of the treatment. For children over six years, the dose was never carried beyond three grammes (sixty grains) during the twelve days. The quantities named were divided into twelve equal parts, and one given each day. The larger doses were again divided into three portions, and taken at intervals through the day. It must be observed that Dr. D. employs the root of the belladonna alone.

Epilepsy.—Since 1815, Dr. D. has employed the belladonna in epilepsies, and other convulsive nervous affections, and deems it a heroic remedy in these diseases. He employs an extract, for which he has given the formula, and though ordinarily the doses have not been carried beyond 5 or 6 grains a-day, yet in some of the cases cited, they were carried to the extent of 13 grains in the twenty-four hours, and that without any unpleasant effect. In one instance, it was given daily in 4 grain doses for twenty months, without inconvenience, and with entire success. He cites numerous cases which have been successfully treated with the belladonna by his medical friends. In many of these cases, proper auxiliary treatment was adopted. Dr. D. however admits that there are epilepsies over which this medicine exerts no control, and some which are even exasperated by its use. Yet he suggests that in some of the instances of failure, the article employed was probably badly prepared.

Hysteria.—Dr. D. cites a case of hysteria of six years duration, attended with convulsions and other distressing symptoms which recurred at intervals of a few days. He began the use of the belladonna, and the doses were carried to the extent of 7 grains a-day. At the expiration of six months a cure was effected. He also gives the history of another case, in which sudden fright was followed by a state of mental alienation, and a nervous attack, attended by an entire loss
of consciousness every night at a fixed hour. These attacks were always preceded by the globus hystericus. This patient was subjected to a variety of treatment. Quinine was given for fifteen days without effect. She was put upon the use of Dr. D.'s anti-hysteric pills, two a-day, each containing two grains of the extract of belladonna. An immediate amendment followed, and the disease disappeared by the fourth day, with the exception of slight gaping. The pills were continued for a month. All the world, and especially the physicians, says Dr. D. "en étaient dans la stupéfaction et l'admiration. The following is the formula for his anti-hysteric pills:

R. Camphor, 12 grammes.
Assafoetida, 12 "
Ext. Belladonna, 4 "
Watery Ext. Opium, 1 "
Syrup of Gum, q.s.

Divide the mass into 120 pills. Of these, the dose is one on the first day, two on the second, and thus augmented a pill each day until it reaches six pills, which are to be taken, two, morning, noon, and night, two hours before eating.

Chorea.—Dr. D. states that he usually treats cases of Chorea with his anti-hysteric pills, and that the disease readily yields to the remedy. He admits, however, that in many instances it returns when the medicine is discontinued.

Neuralgias, local nervous pains, etc.—Acute neuralgic pains, occupying all parts of the head, have been successfully treated with a pomade of belladonna, after all other treatment had failed. Much relief was afforded by it on the first day, and a cure was effected in a month. The belladonna was equally successful in an intense neuralgia of the scrotum, and also in a case of frontal neuralgia with daily exacerbations, which had continued for eleven years in despite all the usual remedies. Dr. D. refers to a case of intense facial neuralgia in which the belladonna proved successful, but from some peculiar idiosyncracy, or special disposition of the optic nerve, it impaired the vision, and produced great dilatation of the pupils, which lasted for several weeks. This is the only instance of any unfavorable effect which came to his knowledge. The following is the formula for the pomade that he employs:

R. Extract of Belladonna, 12 grammes.
Hogs lard, . . . 12 "
Opium, . . . 2 "

Mix thoroughly, and add a few drops of oil of thyme to aromatise it.
A portion of this pomade about the size of a hazelnut is to be rubbed on the affected parts thrice a-day, and especially when the pain is most severe. Each friction should be continued for five or six minutes. If the sight becomes much disturbed, the frictions should be discontinued.

Nyctalopia.—Dr. Debreyne has employed a collyrium or ointment of the extract of belladonna with success in many cases of this affection.

Asthma, etc.—For thirty years Dr. D. has treated "nervous asthma," and spasmodic dyspnœa, simulating sternalgia or angina pectoris, with the powder of the root of the belladonna, combined with expectorants, as the squills, kermes, etc. He says, "we have administered this anti-asthmatic powder more than one hundred times, and never in vain."

Nervous Coughs.—Pills of belladonna have been found useful in all coughs which were not the result of acute thoracic inflammations. In these cases, a pill containing one grain of the extract was given night and morning. In hiccup also, this remedy was generally found serviceable.

Photophobia.—Dr. Debreyne states that he has often employed with much advantage, a collyrium made with two grammes of extract of belladonna in 125 grammes of rose-water, in excessive exaltations of the optic sensibility, and particularly in that of scrofulous opthalmia. Dr. D. states, further, that he has found this article of utility in cases of cataract—incontinence of urine, and spasmodic constriction of various orifices. He deems it our most valuable remedy in most nervous derangements. Although highly valued by many, the belladonna is but seldom employed by others, who from frequent disappointments are disposed to think its virtues overrated. It is probable that much of the article in general use is imperfectly prepared.

Belladonna in Incontinence of Urine. (Gazette Médicale.)—M. Cauvin recommends the use of the powder and extract of Belladonna in incontinence of urine, and especially in that form which proves so troublesome to children. Administered in small doses, two or three times a day for a few weeks, he found it often entirely successful.

New Preparation of Opium. By W. M. Cornell. (Boston Med. and Surg. Journ.)—Some three years since, I saw, in the Dublin Medical Press, a statement from Dr. Nichol, that he had made, and used in his practice, and also given to some of his friends, who also had used the same, what he called "Muriate of Opium." Their tes-
timony was, that it was far preferable to any other solution or preparation of opium. Having tried the acetate and sulphate of morphia and the common tincture of opium, and that prepared by citric, tartaric, sulphuric, and almost all the other acids, they found all these leave the patient with headache, constipation, and many other unpleasant symptoms; but the muriate of opium answered all the indications of that drug, and left none of the unpleasant sensations. Dr. Nichol's formula was the following:—B. Pulv. opium, 1 oz.; muriatic acid, 1 oz.; distilled water, xx oz. Mix. Macerate (often shaking the liquid) for fourteen days. Strain and filter. The dose was from twenty to forty drops, according as circumstances should indicate—not varying much from the tinct. opii.

I tried this preparation, and found it answer the description. Out of twenty persons who took it, none complained of headache or unpleasant sequences. But it was not of a good color, and soon grew muddy, and seemed to be decomposed. I therefore made some modifications of the preparation, until I fixed upon the following formula, which answers admirably, and makes and retains the beautifully red and clear form of that which I herewith send you. I use no other preparation of opium, except the powdered gum in diseases of the bowels. B. Pulv. gum opii, 3i; muriatic acid, 3i.; distilled water, 3xvi.; red brandy, 3iv. Mix. &c. It is of nearly the strength of the tincture of opium, and, I think, much preferable to that of McMunn's elixir.

Lithotomy during Labour. (London Lancet.)—Dr. Monad related the following case at a late meeting of the Surgical Society at Paris:—The patient, forty years of age, was pregnant for the first time, and had arrived at the natural term of gestation. After the evacuation of the liquor amnii, the labour did not progress, in spite of very sharp pains: and it soon became evident that the expulsion of the foetus was prevented by a large tumour in the vagina, situated in its anterior wall. The tumour was hard: it closed almost completely the orifice of the vagina. and it was easy to perceive, by the consistence, form, situation, and mobility of the swelling, that it was formed by a stone lodged in the bladder. The diagnosis was rendered still more conclusive by the introduction of a catheter, which was, however, passed with great difficulty, owing to the displacement of the urethra. Dr. Monad introduced the index of his left hand under the tumour, with the pulp of the finger looking towards it, and gliding a common straight bistoury along this natural director, he made a vertical incision upon the tumour. This incision proved somewhat difficult owing to the inequalities of the calculus. The hæmorrhage was rather large, but soon stopped. The author then tried to seize the stone with forceps, but finally succeeded in removing it with his fingers only. The stone weighed almost three ounces, and was very hard. The patient had been placed under the influence of chloroform, and was delivered by the forceps while still in an anaesthetic state. The child was alive, but soon expired, the forceps, as it is feared, having pressed against a fold of the cord which surrounded the neck of the foetus. The
woman has done very well; and five days after the operation, the urine was passing along the urethra, without any trickling through the wound.

Medical Miscellany.

Medical Society of the State of Georgia.—The annual meeting of this Society will be held in the City of Macon, on the second Wednesday (10th) of April next. An Address will be delivered before the Society, by Dr. R. D. Arnold, of Savannah. Members of the Medical profession who may desire to procure copies of the last year's proceedings, can obtain them by addressing, post-paid, Dr. J. M. Green, of Macon, the Corresponding Secretary, or the undersigned, at Roswell, Cobb County.

C. T. Quintard, Rec. Sec.

By an oversight of the Secretary of the State Medical Association, it was announced in our last number that the next annual meeting would be held on the 20th March. It will be seen, that this meeting will take place at Macon on the second Wednesday (10th) in April. We hope there will be a general attendance on that occasion, and that no one entitled to membership, will fail at least to have his application for membership submitted at that time. The advantages to be derived from an association which will concentrate, and give vigor to the efforts now being made for the advancement of medical science, and for the protection of professional rights and interests, are too obvious to have escaped the attention of the most superficial thinker.

We publish, for the information of those physicians in Georgia who are not members of the Society, the following extracts from the Constitution:

"Art. III.—§ 1. The Society shall consist of every person now present as a member of the State Medical Convention—who is a graduate of a respectable Medical College, or who may be authorized to practice by the legislative act of 1839, re-constituting the Medical Board of the State, and who shall conform to the regulations of the Society.

"§ 2. Any member of the Profession, thus qualified, can hereafter, on written application to the Society, through the Corresponding Secretary, be admitted to it, by a two-thirds vote of the members present.

"Art. VII.—§ 1. The Society shall hold an annual meeting on the second Wednesday in the month of April of each year."

"St. Louis Probe."—We have received a new monthly Medical Journal, bearing this title, and conducted by A. J. Coons, M. D., and
John R. Atkinson, M. D. We cordially welcome this new laborer in the field of medical science, and doubt not that it will do credit to its "two fathers, several wet nurses, and numerous godfathers."

On the action of Chloroform on the Sensitive Plant (Mimosa Pudica.) By Prof. Marcet, of Geneva. (Amer. Jour. Pharm.)—When one or two drops of pure chloroform are placed on the top of the common petiole of a leaf of the sensitive plant, this petiole is seen almost immediately to droop, and an instant after the folioles close successively pair by pair, beginning with those which are situated at the extremity of each branch.* At the end of one or two minutes, sometimes more, according as the plant is more or less sensitive, most of the leaves next to the chloroformed leaf and situated beneath it on the same stalk, droop one after another, and their folioles contract, although generally in a less complete manner than those of the leaf placed in immediate contact with the chloroform. After a rather long time, varying according to the vigor of the plant, the leaves open again by degrees; but on trying to irritate them by touch, it is seen that they have become nearly insensible to this kind of excitement, and no longer close as before. They thus remain as torpid for some time, and generally do not recover their primitive sensitiveness till after some hours. If, however, when they are in this state of apparent torpidity, they are subjected again to the action of the chloroform, they close again as they did the first time. It is not till after they have been chloroformed several times, that they lose all kind of sensitiveness, at least until the next day; sometimes they even fade completely at the end of too frequent repetitions of the experiment. In all cases the effects observed are the more marked in proportion to the purity of the chloroform employed and the degree of sensitiveness in the plant.

Mortality of England.—(Bulletin Gén. de Therap.) The mean mortality in England at this time is 350,000 annually—that of London 47,000. As the population of England and Wales is about 16 millions, and that of London about 1,900,000, it follows that the annual mortality for the metropolis is 1 in 40, and for the whole kingdom 1 in 45. At the commencement of the eighteenth century, the annual mortality in England amounted to 1 in 25; and towards the middle of the last century, under the influence of causes not known, it increased to 1 in 20. Since that period to the present day, the annual mortality has steadily decreased; in 1801, it was 1 in 35; in 1811, 1 in 38; and now, 1 in 45; so that in 40 years the probabilities of life have been doubled. This result is without parallel in the history of any

* I previously convinced myself by experiment that a drop of water, placed delicately on a leaf of the sensitive plant, caused no movement.
other people. In Paris, about the middle of the last century, the rate
of mortality was 1 in 25; it is now 1 in 32. In Rome, the annual
average is 1 in 25; in Amsterdam, 1 in 24; in Vienna, 1 in 22. An
inhabitant of London, therefore, has double the chances for life pos-
sessed by a resident of Vienna.

0\textsuperscript{7} The Transactions of the American Medical Association have
been received, but at too late a period to permit us to notice them in
this number. These proceedings make an octavo volume of 956 pages.
To procure this volume, three dollars, in par funds, must be remitted
to Dr. Isaac Hays, Philadelphia, Treasurer of the Association. Every
physician should procure a copy.

\begin{footnotesize}

\textbf{METEOROLOGICAL OBSERVATIONS}, for January, 1850, at Augusta,
Ga. Latitude 33° 27' north—Longitude 42° 32' west Wash. Altitude above
tide, 152 feet. By Dr. Paul F. Eve.

\begin{tabular}{lllll}
\textbf{Sun Risc.} & \textbf{Bar. Ther.} & \textbf{2, P. M. Bar. Ther.} & \textbf{WIND.} & \textbf{Remarks.} \\
\hline
1 & 32 & 30 12-109 & 46 & 30 17-100 & W. & Cloudy—very white frost. \\
2 & 40 & 30 10-100 & 58 & 29 93-100 & s. w. & Cloudy. \\
3 & 46 & 29 87-100 & 62 & 79 100 & s. w. & Fair, part of afternoon. \\
4 & 51 & " 65-100 & 60 & 78 100 & w. & Flying clouds—strong wind. \\
5 & 34 & " 99-100 & 56 & 30 3-100 & e. & Fair, part of afternoon. \\
6 & 43 & 30 10-100 & 46 & 30 6-100 & e. & Cloudy—rainy. [at 1, p.m. \\
7 & 42 & 29 92-100 & 48 & 29 71-100 & s. e. & Rain, 45-100—thund. and light. \\
8 & 49 & " 75-100 & 62 & 78 100 & s. w. & Cloudy. \\
9 & 42 & " 90-100 & 54 & 97 100 & w. & Cloudy. \two nights and one \day, 1 inch 5-100. \\
10 & 48 & " 95-100 & 50 & 78 100 & s. w. & Cloudy—storm. \\
11 & 48 & " 41-100 & 70 & 39 100 & w. & Cl'dy afternoon. \light. 40-100, \\
12 & 50 & " 63-100 & 69 & 67 100 & s. & Cl'dy—rain at 7, p.m.—thun. \& \\
13 & 41 & " 73-100 & 62 & 66 100 & n. & Fair, part of afternoon, \\
14 & 41 & " 90-100 & 54 & 30 3-100 & e. & Fair, part of afternoon. \\
15 & 38 & 30 11-000 & 50 & 30 11-00 & e. & Rain at 2, p.m. \\
16 & 44 & 30 & 56 & 29 92-100 & s. e. & Cloudy—spinkle. \\
17 & 53 & 29 84-100 & 73 & 76 100 & s. & Cloudy—rain. \\
18 & 62 & " 60-100 & 63 & 58 100 & s. e. & Somewhat cloudy—spinkle. \\
19 & 47 & " 80-100 & 62 & 90 100 & n. e. & Rainy. \\two inches. \\
20 & 49 & " 93-100 & 53 & 78 100 & e. & Rainy night and day. \1 inch \\
21 & 46 & " 56-100 & 50 & 50 100 & n. e. & Fair. \\
22 & 42 & " 70-100 & 60 & 81-100 & s. & Fair. \\
23 & 39 & 30 & 69 & 30 3-100 & e. & Fair morning. \\
24 & 48 & 30 7-100 & 72 & 30 5-100 & s. & Cl’dy, breeze, rain. \1 inch \\
25 & 51 & 30 & 76 & 29 95-100 & s. & Cl’dy, rainy evening. \40-100. \\
26 & 60 & 29 94-100 & 76 & 85-100 & s. & Rain. \\
27 & 60 & " 77-100 & 63 & 74 100 & s. w. & Cl’dy, rainy evening. \2 inches. \\
28 & 60 & " 63-100 & 60 & 57 100 & s. & Fair. \\
29 & 48 & " 80-100 & 63 & 92 100 & n. e. & Fair. \\
30 & 37 & 30 11-000 & 60 & 30 23-100 & n. e. & Fair. \\
31 & 33 & 30 26-100 & 56 & 30 26-100 & s. & Cloudy—spinkle. \\
\hline
\end{tabular}

4 Fair days. Quantity of Rain 5 inches 30-100. Wind East of N. and S.
12 days. West of do. do. 10 days.

Quite a remarkable month. We had no frost in 29 successive days. 16
rainy days, and only 4 fair days during the whole month.
\end{footnotesize}