On the Treatment of Fractures of the Femur; read before the Medical Society of Montgomery. By William J. Holt,* M.D.

Montgomery, Ala., Feb. 4th, 1867.

Having recently had an opportunity of testing the efficacy of an apparatus of my device—or if you will, my modification of an old apparatus—I have thought that an examination of it by you, with a discussion upon the mechanical treatment of fractures of the femur, would not be uninteresting. I do not claim perfection for this apparatus, but improvement, and hope that your criticisms will be free, and that I may elicit something in the discussion of this subject which will give us the desired perfection.

By the mechanical treatment of fractures, I mean the use of such appliances as will give sufficient support to

*Dr. Holt was a distinguished Surgeon in the Russian army during the Crimean war, and subsequently in the Confederate service. He informs us that, since writing this article, he has used the method here recommended in several other cases with complete success.—Ed.
the fractured limb, while the healing process is going on, and prevent undue deformity. For the proper performance of our duty, then, as Nature's Assistants, there are two indications of prime importance to be met.

First. The reduction of the fracture, or, in other words, the placing the fractured ends of the bone in apposition, or in the event of comminution with loss of bone, the placing them in their proper direction.

Second. The fixing them in a state of coaptation or holding them in their normal direction until a callus be formed and become sufficiently strong to permit us to dispense with artificial support to the limb.

But as nature is sometimes very slow in doing her work of repair, and as tedious months of suffering must be looked for, especially in cases of compound comminuted fractures, there are two other indications of great importance, and absolutely requisite for the perfection of treatment. These are, so to say, almost antagonistic to the second indication, and are—

First. The comfort of the patient while confined to his bed, admitting of change of position, thereby preventing bed-sores and other discomforts of a long-continued position on the back; and,

Second. The frequent inspection of the diseased limb, enabling us to cleanse it, make the necessary topical applications, open abscesses, remove spiculae, and in fact to meet any emergency which may arise in the progress of the case.

We thus have four indications, which may be summed up as—

1st. Reduction.

2d. Securing the reduction.

3d. The comfort of our patient.

4th. The inspection of the limb.
The importance of meeting these indications with a suitable apparatus has been felt since the earliest ages, and the means proposed are as various as man’s ingenuity. I will spare you a historical discussion of the subject, but must say that in this branch of our profession the skill of the nineteenth century can boast but little over the common sense of Hippocrates. In all cases, but more especially in military surgery, a very important part of the treatment consists in the proper removal of the patient from the place at which he receives his injury to his bed, as the result of the case may thereby be very materially influenced. Before removal is attempted, the limb should be firmly supported by splints and compresses, so that the fractured ends of the bone may not unduly lacerate the soft tissues. In an emergency, shingles, a fence-board, or even round sticks may be used.

While making preparations for the expected attack by the Federal army at Corinth, in the Spring of 1862, the idea of making splints of bark was suggested to me by seeing the soldiers take the bark from the trees for the purpose of shelter. The best splints were procured from young poplars eight or ten inches in diameter, and being prepared by taking off the rough outer bark and drying it under press, it proved to be both light and strong, and with a natural curvature which easily encased the limb. Much has also been said of the bed, and very ingenious contrivances have been made, but the best one is that which will be perfectly horizontal, sufficiently hard to obviate inequalities, and not too hard for comfort. I have sometimes prepared the bed by cutting the mattress as high as the body, and after taking away one half its width, filling the vacuum by a series of bran bags, three or four inches in diameter, one on the other for the length of the entire limb. By this arrangement the bed-pan can be used with comparatively little discomfort, and by
taking away the bags in succession the whole limb may be inspected with but little motion, and unsupported for not more than the diameter of the bag. After having placed our patient upon as comfortable a bed as possible, we now begin the treatment proper, and must meet the first indication, the coaptation of the fractured ends of the bone or the placing them in their proper direction. Without fatiguing you with a recital of the many apparatus suggested for this purpose, they may be summarily classed into such as have the body the fixed point, or point of counter-extension, making extension upon the limb, and such as have the limb fixed or counter-extended, and the body as the point for extension. As a type of the first class I will mention Physick's modification of Desault's splint; and as types of the second, the inclined plane and Smith's anterior splint. Of these I greatly prefer the first mentioned, and think that any apparatus, based upon the principle of extension by the body, radically faulty. In meeting the second indication a most ingenious innovation was made by the Arabs, who instituted the use of plaster, by which the limb is encased in a perfect mould, thus retaining the parts in a state of immobility. I have seen the plaster apparatus used in one case, and I do not like it, from the fact that it is, when complete, a ponderous, unwieldy affair, the material not always at hand, and it presents no advantages over the immovable starch bandages. Immovable agglutinative apparatus were in use in the time of Hippocrates; they gave way to other methods, and were almost in disuse until revived by Larrey, who was an enthusiastic advocate of the immovable starch apparatus. His bandage, however, only meets the second and third indications, and is of itself, I think, very incomplete and inadmissible in compound fractures, though he vaunted it very highly in those cases. The method of Mayor, as
also the anterior splint of Smith, I think inefficient in
meeting this as well as the first indication, for the body
can not make sufficient extension to retain in coaption
the fractured bones, if the patient is allowed to enjoy the
mobility which is claimed as the greatest advantage in
those apparatus. To meet the third indication, the in-
movable starch apparatus of every kind certainly possess
the greatest advantages, though the apparatus of Mayor
and of Smith are much better than any system of mova-
ble splints. For the fourth indication, all movable appa-
ratus are preferable to the immovable. Thus we see that
no apparatus will meet all of the indications mentioned,
though some one of the indications can be filled by any
of them. Hence, in the treatment of a case, we must
endeavor to blend the advantages possessed by each.

If called upon to treat a recent fracture of the thigh, I
would apply Physick's apparatus, and keep up constant
traction upon the fractured limb until the contractile
power of the muscles should be overcome as much as
possible, and the oedema disappears. When this stage
(which may be termed the acute) has been passed, and
the patient begins to suffer from the constant confinement
to one position, I would recommend the application of
the apparatus of which the one I now present for inspec-
tion is a very imperfect model. Though it may be applied
immediately, and as the oedema disappears, it can be re-
duced in size by paring the edges. I have tried it in two
cases of compound, and one of simple comminuted
fracture, with gratifying success, and would like to see it
further tested.

The first case was that of a Sardinian officer, wounded
in Cardigan's famous charge at Balaklava, by which the
femur was badly comminuted by a canister shot which
entered about two inches above the external condyle of
the femur, and, ranging upwards and inwards, lodged
under the skin of the perineum. I first saw him about a month after the reception of the wound, and found him upon a double inclined plane, of which he complained as being insupportable. I removed that, and for more convenience in inspecting and dressing, placed the limb upon the bran bags (spoken of before) and supported it with two long splints. Soon after this I was taken sick, and when I again saw him, six weeks later, I found him wearing Larrey's starch bandage, applied by Piragoff. His condition being exceedingly critical, with strong symptoms of pyemia, this apparatus was removed in two longitudinal halves, and some fragments of bone extracted. He was again placed upon the bran bags with some relief, but his incessant complaints of his back, upon which there was an immense bed-sore, urged me to devise something for his relief, and this apparatus is the result of my labor. It was suggested by an examination of the halves of the old apparatus of Larrey, which were still in his room. I immediately applied it with the paper modification, and as soon as it was completed and my patient placed upon his side, he overwhelmed me with expressions of gratitude for the relief he felt. Up to that time there was no evidence of bony union, and while applying my apparatus, I extended the limb powerfully with Physick's apparatus. He began to improve soon after using this apparatus, and in six months after the reception of his wound he could walk unaided and with but little shortening of the limb.

The second case was that of a young man who had his thigh fractured obliquely at its upper third by a minnie ball at the battle of Murfreesboro. In this case I first used Physick's apparatus, and about ten days from the reception of the wound I applied this. He convalesced very rapidly, and was going about on his crutches in a month after he was wounded. He left me in about two
months, with no shortening of the limb. A short time, however, after leaving me, he fell violently forward on the steps while making a leap with his crutches. The limb was unsupported at the time—no effort was made to arrest the overlapping of the fractured ends of the bones caused by the violent breaking up of the callus, and the result is some shortening.

The last case is the one upon whom was placed the splints before you. About the 25th of October, 1866, I was called to the country to see R. S., a colored man, aged about fifty-three, whom I found with a comminuted fracture of the upper third of the thigh, caused by a fall from a height of fifteen feet upon a log. Wishing to have him more constantly under my eyes, I had him brought to the city, and with the assistance of Dr. Gaston applied this apparatus. Before applying this he had worn Physick’s apparatus for several days, and continued to wear it until this was completed. Nothing occurred to impede his convalescence, and, yielding to his entreaties to return home, he left me about the middle of December and before the callus was firm. Before leaving, an accurate measurement was taken of both limbs by Dr. Gaston, and there existed absolutely no shortening. Soon after leaving me he opened the apparatus, as you see, at the ankle, to relieve pressure; and hence deprived the apparatus of one of its greatest virtues. The result is about half an inch shortening, when there should have been none. But even as it is, I know of no apparatus which, under the circumstances, would have been attended with so good a result.

The manner in which I usually proceed to apply the apparatus is as follows: After preparing a sufficient number of strips of brown paper (the unglazed paper is the best) from one to one and a half inches wide, and long enough to pass round the limb, I cover them with
flour paste, or other agglutinative substance, on both sides, and place them upon a piece of cloth wide enough to support the strips and long enough to extend from the upper margin of the pelvis to a few inches below the heel. Commence at the upper extremity and place the first strips from the perineum to the upper margin of the ileum diagonally, to fit more snugly the pelvis, and let each strip cover two thirds of the preceding one, and thus continue as far below the heel as it is desired to cover the foot. Then recommence a second layer; and, if desired, a third, and when completed the three layers will make nine thicknesses of paper. Before applying, it is well to cover the layers of paper with strips of dry cloth, to protect the limb from the paste. When this part of the work is completed, the patient should be carefully raised and the whole placed accurately under him. Then apply the strips of cloth like the bandage of Skultetus, and after that the paper in the same manner, taking care to apply them with exactness, more especially about the foot and perineum.

In the next case I have, I shall place a small compress over the patella before applying the paper, as all of my patients have complained of pressure at that point. In my first case I had some difficulty in cutting the apparatus in two when dry, and since then I have removed it only when sufficiently dry to preserve its form. It should be divided into two longitudinal halves, as nearly equal as possible, and when removed their edges well adapted and held together by strips of paper pasted across their seams, and after covering this artificial limb well with a bandage, the cavity should be filled and strongly packed with bran or sand to prevent the edges turning in, or other warping, and to retain the form of the limb until it is perfectly dry. When dry the
bandage may be removed, and the process of layering conducted to any desired thickness. I would here suggest that in pasting the paper several aids be engaged, and the layering rapidly done, so that the strips of paper may not become too dry and stick together, thus rendering their application the more troublesome. The bandage should extend sufficiently high on the foot to support it and should embrace well the pelvis and perineum. The application of the paper should be made with the limb completely extended, and the traction on the limb should not be lessened until the paper becomes hard or is removed. Thus we have an apparatus light and strong, by no means difficult of application, and when completed, there is comparatively little trouble in treating the most protracted cases.

I claim that my apparatus meets more nearly all of the indications than any other, and by the aid of Physick's apparatus in completing it, it meets them all. Being applied while the limb is perfectly extended, and allowed to harden on the limb, grasping the foot firmly and fitting snugly in the perineum, it keeps the limb permanently extended, thereby meeting the second indication. Fitting as it does closely all of the inequalities of the surface, and holding fixed and extended the muscles and the ends of the bone in exact apposition or in their proper direction, the patient is enabled to change his position in bed, sit up, or even walk about, thereby filling the third indication. By cutting open the apparatus by a longitudinal section on its anterior and posterior aspects, two complete troughs are formed, either of which by confining the limb to it is sufficient to retain immovable the fractured ends of the bone. By removing in turn each half, the whole limb may be inspected, and thus is fully met the fourth indication. The apparatus may be securely held
together by three or four bandelets tied at equal distances apart.

In the case of a compound fracture, a fenestrum should be made for the escape of pus. I would suggest that when completed the apparatus might be painted or varnished, or covered with some other substance which would render it impervious to water, and admit of the application of water dressings. I have never used anything but flour paste, but I can imagine several substances which might be preferable, though none so easily obtained.

I have spoken of my apparatus as applied to fractures of the femur, but the principle may be applied to many other cases. I have applied it with great benefit in two cases of resection of the head and portion of the shaft of the humerus, and once made a very comfortable apparatus for a fracture of the bones of the forearm with newspapers. Besides its other advantages, I claim that the facility of obtaining the materials for its manufacture constitutes a very important advantage, for cloth may be substituted for paper. I have stated that this might be called a modification of an old apparatus, but I claim that the modification is important enough to give it individuality. I especially recommend its use in cases of compound fracture, though when used in simple fractures (especially where there is much confusion of the soft parts) it will contribute very much to our peace of mind by permitting us to examine occasionally the work that is going on under our appliance, and it will certainly add to the comfort of our patient to sponge the limb from time to time.

I was summoned at 6 p.m., on March 9th, 1867, to see Mrs. —, a prima para, aged nineteen, stout, robust, and very plethoric; was informed by her that she had "grinding" pains at regular intervals of fifteen or twenty minutes since 11 a.m., and that she was under the impression that she was not at full term. I made an examination, and found the os very high up, undilated and rigid. She stated that she had had an unusual fulness about her head for the past three weeks, that her limbs were swollen and that the pain in her arms was so great at night as to prevent her from sleeping, that about ten days since, while going down the steps she fell, but experienced no inconvenience from the fall, not even soreness.

The pains continue to increase in severity, and at 10 p.m. she had heavy bearing down pains, when I again made an examination and found the os in the same position and condition. Up to this time there was nothing unusual in her appearance. Expressing a desire to empty her bladder, I retired from the room, leaving her in charge of her husband and nurse, and was informed upon my return to her chamber that she had voided urine, and had sat up before the fire, warming her feet (which, notwithstanding the application of hot irons, continued cold), and that while up there was a wild expression about her eyes. I detected a slight twitching about the facial muscles and at once bled her sixteen or twenty ounces, and dispatched a messenger for my friend Dr. D. W. Hammond.

He arrived at 12 m., when she had a violent convulsion. Upon consultation we determined to apply mustard sinapisms to her head, and to try the effect of chloroform, the free inhalation of which seemed to modify, but not
arrest the convulsions. Examination revealed no change in the condition of the os; ordered the following:

R.—O1. Recapit 3i.; O1. Terebinthina 5i.;

which she retained, though she had been vomiting occasionally all night. Dr. H. and myself both remained with her until 7 a.m., when I was summoned home, leaving her in his charge, and promising to return at 8½ o'clock, and to invite Dr. C. B. Nottingham to see her with us.

I returned at the specified time, and was informed by the Doctor that during my absence she had thirteen convulsions, and that each one was more terrific than its predecessor, that her face became livid, breathing stertorous, and in fact she was almost comatose. We determined to make an effort to force the finger through the os, and if possible rupture the membranes, which was accomplished after much difficulty, the contraction being so firm that it was almost impossible to move the finger.

At 9 a.m., Dr. Nottingham arrived, when the patient had another convulsion, which seemed as if it would terminate her existence. Upon examination (there being no change in the condition of the os) we determined to bleed her again, which I did copiously, and to wait until 12 m. for further developments, at which time Drs. H. and N. were to see her. After the loss of blood she was more quiet, although her breathing was heavy and labored. At 11 a.m. she became restless, tossing to and fro, requiring two or three attendants to keep her in bed. At 11:20 she had another convulsion, followed at short interval by another; a few minutes before 12 another, when the Doctors arrived, and determined that something must be done, and speedily; patient insensible, and os still undilated; agreed upon bilateral incision of cervix uteri; drew her to the edge of the bed, limbs drawn up and supported by Dr. N. and myself; Dr. Hammond
proceeded to divide with a probe-pointed history the undilated neck of os in a lateral direction on each side, cutting toward the right and left acetabulum, and then forcibly dilating with finger, introduced a hook, caught the foetus in the groin (being a breech presentation), drew it down, and in a few minutes delivered her of a dead female foetus about seven months; patient still insensible, and circulation very feeble; placenta taken away entire, but uterus not contracting well, introduced the hand, removed a quantity of clots, and inserted a piece of ice; put her to bed, and ordered feet kept warm, head cool, and flaxseed mucilage kept constantly applied to her tongue, which was very much swollen from being bitten during convulsions, although efforts were made to prevent it by the introduction of a piece of wood and a spoon between her teeth; to meet at 5 p.m., during which time she had no more convulsions; condition comparatively comfortable; drew off urine with catheter.

March 11th, 8½ a.m. Again used catheter; patient seems rational, and answers questions by nod or shake of the head, tongue being too much swollen to articulate. 5 p.m. Ordered Ol. Recini 3i.; Ol. Terebinthae 3i.; used catheter; circulation 100; has a more natural appearance.

March 12th, 8½ a.m. Quiet this morning; bowels well acted on by the oil; did not use catheter, urine having been voided. 5 p.m. Restless; pulse 112; ordered anodyne draught.

March 13th, 8½ a.m. Did not sleep well; complains of pain in breast, which are distended and hard; ordered light diet, and to rub the breast with camphor soap liniment; mind entirely clear, but does not remember what has happened.

March 14th. Improving.
March 15th. Restless; ordered forty drops elixir opium.

March 16th and 17th. Doing well.

March 18th. Discharged.

Remarks.—The foregoing case has thus been minutely described, because to my mind it was an extraordinary and peculiarly interesting one, from the protracted and persistent, unyielding rigid os uteri, and from the novel but successful mode adopted for its relief. "Under the head of difficult labor, may properly be considered all cases where, from any cause, the delivery is retarded or rendered dangerous."

In this case the delivery was not only retarded but rendered imminently dangerous by the rigid and unyielding condition of the os uteri. The remedies, according to the best standard authors, are blood-letting, nauseants, the use of beladonna to the parts, and, above all, anaesthetics. Recently it has been suggested in slow dilatation of the os to divide to a limited extent a portion of the circular fibres, but I believe has not met with much favor from the profession, because it is considered dangerous and rendering the patient liable to rupture of the uterus. Opiates have been recommended when the labor is tedious, its advocates claiming that it quiets the contractions, thereby giving time for the circular fibres to dilate.

In the case under consideration the patient had been nauseated and vomited frequently, was bled copiously, and kept under the influence of chloroform for several hours, all of which had no influence in dilating the os uteri. The beladonna was not applied, because the writer has never seen any good effects from its use, and this opinion has been corroborated by the experience of his personal friends in the profession. A full opiate would have been given (as the patient was persuaded she was not full term)
had it not been for the hyperemia of the brain which to my mind clearly contra-indicated its use.

Here, then, we have a case in which all the remedies have been employed that have been recommended, where the os does not dilate, all of which had no effect. The patient in imminent danger of dying from convulsions, and this bilateral incision of the cervix uteri was performed, which not only arrested the convulsions—having removed the cause—but terminated successfully, the patient having not one threatening symptom, but a speedy recovery:

Not having seen this particular operation reported, I desire to impress upon the profession the facility with which it can be performed when necessary, and that, too, with a reasonable hope of success.

Obligations of the Public to the Medical Profession. Read before the Georgia Medical Association. By R. C. Word, M.D., of Atlanta, Ga.

It is proposed in this paper to submit a few thoughts in relation to the want of appreciation by the people, of the peculiar difficulties which, to the medical profession, more than any other, have resulted from the late unfortunate war. The cause of medical science, not less than the interests of the practitioner, is jeopardized, and it would seem, therefore, a duty, both to the public and the profession, to speak out upon this subject.

In former times the principles of medical ethics, by which we were governed, were in some degree understood and acquiesced in by the more intelligent in the community. These principles recognized certain reciprocal obligations between the members of the medical profession and the public, and both were expected to perform their part; now, however, the rule appears to be changed
—the physician is expected to perform his obligations, while the people seem to regard themselves released from theirs.

We think it may be said, without boasting, that the true men of the medical profession in Georgia, and indeed throughout the whole South, are endeavoring to discharge their duties to science, and to the public, and are moving onward, despite the adverse circumstances of the times, in the same noble and benevolent spirit which has ever characterized medical men as a class.

The existence of the Medical Association of Georgia is, of itself, evidence of a spirit of investigation and progress amongst the members of the profession in the State. Its labors are devoted to the cause of science and to the public good. There are two medical journals in successful operation in Georgia, and several others in the South, and the work of collecting statistics and useful facts, from the records and experience of the war, is being diligently prosecuted.

On the other hand, what can we say of the conduct of the public toward the profession? Amid the turmoil and confusion of business pursuits, and the anxieties incident to the present disturbed state of the country, men seem to have lost sight of those great principles and rules of action which look to the general welfare. One of these rules which should govern the conduct of every good citizen, is the furtherance of science, and the advocacy of truth.

The great progress of medical science in the last half century, and the discoveries resulting therefrom, have proven of incalculable benefit to mankind. Take the single article of chloroform, and reflect upon the relief it afforded to the thousands of our suffering soldiers during the late horrible war, not to mention the suffering it has prevented in private practice, and who can place an esti-
mate upon its value? In the treatment of disease, in surgery, in chemistry, in public hygiene, and, in fact, in every department of medical science, the public is reaping the benefits of a rapid and unprecedented advancement.

Is it the desire of the people that this work of progress and improvement shall continue? If so, they should not neglect the true men of the profession. The sober, the educated, and the conscientious members of the profession should be sustained; for to them the country looks for the promotion of medical science, and they are the true conservators of the public health. Upon them alone can the people safely depend in cases of trying and critical emergency, and their presence furnishes a safeguard and protection to life and to health which should not be lightly estimated.

How often does it happen, especially in this day of accidents by steam and machinery, that cases occur in which the highest skill and science alone can avail to save life—cases wherein impudence and humbuggery can not cloak the ignorance and inefficiency of the imposter, and wherein the life of the sufferer absolutely depends upon the prompt attendance of the skillful and educated physician? The presence of the intelligent medical man in a community is, then, a matter of serious importance, for critical cases, of the kind alluded to, may happen at any moment, and, indeed, are far more frequent than is supposed, for they are not always palpable to the non-professional observer, even in surgical cases, much less in ordinary diseases. It is in the latter class of cases that the quack so well succeeds in getting the people who, while acknowledging the necessity of calling upon the man of science in these rare and critical cases, nevertheless too often bestow upon the quack the more lucrative, because the more frequent, emoluments of the
daily practice. Such a course on the part of the people is both wrong in principle and suicidal in policy; and it is well that the public be advised of the fact that it is driving from the profession those who are morally and intellectually best qualified to practice its humane and responsible duties.

But patronage to quackery over legitimate medicine is not the only evil of which we complain: there is yet another which is forcing many worthy men from the practice of medicine into other channels. It is that medical bills are not paid, and that medical men are not allowed by public sentiment to present their bills for collection, and require prompt payment thereof, as is done in other departments. Custom has invested the medical profession with a dignity which places it in a different position from other avocations in the matter of collecting debts. If the physician drives his patrons he lowers himself in their estimation, and not unfrequently gives offence. Why is this, and why is it considered a lowering of professional dignity for the physician to demand his pay? The cash system now holds in every other department. How is the physician to meet the cash demands that are daily made upon him when he is required to credit indefinitely any and everybody?

When the medical man applies for credit at the store, or the provision market, he finds that deference to professional dignity does not avail to relieve him from the demands of the cash system, and the merchant plainly tells him, "Sir, my rule is cash; we let no goods go without the money." This, it will be said, is right. Grant it. But reverse the case, and let this identical merchant send for the physician, who replies to him, "Sir, my rule is cash; I visit no case without the money." Would not the merchant be highly offended, and would he not
ever afterwards regard this physician as an exacting and unfeeling man, and unworthy of patronage.

It is a fact well known, and one to which the public mind should be directed, that hundreds of the best men in the profession are being literally starved out by this unjust and ungrateful discrimination. We say ungrateful, because the conscientious medical man has claims upon the community far beyond the amount due by the few who are willing or able to compensate him for his services. He is a public benefactor in the highest sense of the word. The people are strangely insensible to the fact, that the physician does an amount of gratuitous labor far surpassing that of all other callings combined; and as the burden of caring for the poor should rest equally upon all classes, the undue proportion which the physician sustains should be placed to his credit as against the community. The argument that these charities are incident to the profession he has chosen, and must, therefore, be borne, is too illiberal and unjust to merit a reply. Yet it is evident that such is the light in which their services are viewed, and that little or no merit is attached to their performance. To such an extent, indeed, has this feeling grown upon the popular mind, that the physician seems to be regarded as a mere philanthropist, whose duty and pleasure it is to act for the public, and who requires, and is entitled, to no compensation.

In Germany, and in other European countries, the Government provides for the medical treatment of the poor; but here the Legislature not only refuses to compensate the practitioner, but hightens the infliction by imposing upon him a heavy specific tax.

In 1860 the Medical Association of Georgia, in a memorial to the Legislature in reference to the injustice of the specific professional tax, thus alludes to the gratuitous services of the physician:
At all seasons, and in all kinds of weather, in the dark hours of night when others are asleep, the medical man passes from one scene of distress to another, bestowing his labor, impairing his health, and dispensing drugs to the indigent sick. To this course he is impelled by two powerful forces; the first and greatest is the demand of humanity, which, to a conscientious man, leaves often no alternative by which to escape the call. The second is the force of public sentiment, which will not tolerate in the physician that freedom of action which it allows to others. The merchant may refuse credit to whom he chooses; the druggist may decline to sell to an insolent customer, and it is well; but the physician who exercises this liberty brings upon himself the severest censure, and consequent injury to his character and business.

To the many cases of casualty and death which occur in this fast age, a large proportion of which is amongst the poorer classes, the physician stands a ready servant, subject to every beck and call, and is expected and required to have in readiness all the appliances and material, at whatever cost, adapted to every emergency. By his promptness, skill, and benevolent agency, he relieves large numbers, and oftentimes rescues them from impending death. When under analogous circumstances a party is snatched from a burning dwelling or a watery grave, the individual who performs the deed is esteemed a hero. When a mariner rushes to the rescue of a distressed crew, he gains for himself laurels of praise and medals of honor. Not so the physician. He is regarded as having performed a mere commonplace duty, and scarcely meets with a passing commendation; and such is the tyranny of custom and law, that if he refuses to respond to every call, he encounters the indignant frown of the community, and failing, from the want of facilities or other cause, to adopt the most scientific treatment, he becomes liable to prosecution and heavy damages.

When the cholera or other destructive malady rages as an epidemic in a community, the physician remains at his post facing danger and death for the public. In the medico-legal investigations, at coroner’s inquests, and in post mortem inspections, the services of the physician are required, and yet the State has made no adequate provision for his compensation.

If in the days of peace and prosperity these burdens bore unequally and hard upon the medical man, what are they now, when the proportion of poor to be treated has
increased ten fold, when the proceeds of the negro practice has been cut off, and when increased specific taxes by the State, the County, and the Federal authorities are extorted from the practitioner?

Medical men, as a class, are proverbially benevolent and kind, and have ever borne with patience the heavy responsibilities of the practice and the exactions of the public; but the time has arrived when in consequence of their own destitution, and the impoverished condition of the masses, they feel constrained to protest against the vast inequality of the burdens they are called upon to bear.

Other facts could be adduced in proof of the positions assumed, and to show that the physician is a public benefactor, and is entitled to the gratitude and support, instead of the censure and neglect, of the public. But we conclude by recapitulating the points we have endeavored to establish.

1st. There are reciprocal obligations between the public and the members of the medical profession.

2d. The medical men are nobly discharging their duties, but the people are unmindful of their obligations, which require them, both as a matter of principle and of policy, to support the true men of the profession.

3d. Medical men are not paid: they are forced to adopt the old credit system, which is but little better than starvation, as the result of which many good men are leaving the profession.

4th. Medical men are benefactors to the public, for which neither the Legislature nor the masses of the people have any just appreciation.
A Case of Femoral Aneurism treated by Ligation. By De-Saussure Ford, M.D., Professor of Anatomy in the Medical College of Georgia.

In September, 1864, William, a negro, twenty-three years old, was wounded by a load of buck shot; a few minutes after, four or five of them were extracted from the posterior part of the left thigh, where they entered.

The patient made the following statement: there was free hemorrhage immediately after he was shot—the wounds, after suppurating for three months, finally healed—there was no tumor noticed until after the healing was completed, but, soon after, a small tumor was discovered in the inner part of the thigh. January last he came to this city for treatment. There was a large aneurismal tumor, five inches in diameter at the base, which occupied the lower angle of Scarpa's triangle. Treatment by compression was commenced, but the pain was so excessive the patient refused to submit to it, and returned to his home in Madison, Ga.

He presented himself again in February, the tumor very much more enlarged. After recovery from an attack of tonsillitis, he consented to submit to an operation.

The wound having been inflicted from the rear, there was some doubt whether the femoral or profunda artery was wounded. After consultation with other members of the Faculty of the Medical College, I determined to cut down to the femoral artery in Scarpa's triangle, and if pressure on the vessel below the profunda arrested the pulsations on the tumor, to ligate; accordingly, on February 13th, at the Freedman's Bureau Hospital, assisted by members of the Faculty, and in the presence of the students of the Medical College, chloroform having been administered, I made the usual incision for reaching the vessel in the upper part of Scarpa's triangle, and succeeded in ligating.
the femoral artery about an inch below the profunda, which was given off rather higher than usual, a fortunate circumstance for the favorable result. After the wound was dressed, the limb was enveloped in a flannel bandage, from the toes to the hip, and the temperature carefully noted, with the thermometer, for thirty-six hours. The anastomatic circulation was so rapidly established that there was little diminution in the temperature of the limb.

Four days after the operation, William was attacked by variola, and was removed to the Small Pox Hospital. During the progress of this disease, which was of a mild form, the ligature came away March 1st, fifteen days after the operation. The tumor had decreased so perceptibly, with every indication of its early absorption, and the wound made by the operation so nearly healed, he was allowed to return to his home March 21st.

William dates a letter May 13th, three months after the ligation, in which he says: "The place you operated on my leg is going down very fast; it is not more than half the size when I left Augusta. Dr. Knight has examined it twice since I came home, and says it is getting along very well."

The Restraining Nerves, a Contribution to Nervous Pathology.
By Drs. A. Eulenburg and L. Landois.

Although until recently only two great groups of nerves were recognized, the sensory and motor, yet latterly a third group, the restraining nerves, has been added to the former. The elucidation of the diseases of these restraining nerves is the subject of the present paper.

Under restraining nerves are included all those that interrupt, anywhere or anyhow, irritation produced or movement originated elsewhere. Their function, therefore, consists in the staying of movement. These nerves, like all others, are liable to disorder, both in their active and in their conducting apparatus. Besides these central
ganglia and fibres, the restraining system possesses also special peripheral terminal organs, to which the restraining impulse excited in the centre or in the conductor is directed, and in which it is fulfilled. The terminal organs appear to be ganglia, standing in relation to the motor apparatus.

The nature of the disorders may be either to increase or diminish the proper function, as in the nervous system elsewhere.

The range of these nerves comprise four systems, in which the restraining action has at present been clearly shown by physiology. They are:

1. The restraining system of the heart movements (cardiac, or that of Weber and Budge).
2. The restraining system of the intestinal movements (respiratory, or Rosenthal's).
3. The restraining system of the intestinal movements (peristaltic, or Pflüger's).
4. The restraining system of the reflex movements (reflex, or Setschenow's).

Corresponding to these are restraint neuroses of the heart, the respiration, the peristaltic movements, and of reflex action.

1. The restraint of the heart.

Their physiological basis is the experiment of Weber and Budge, showing that irritation of one or both vagi diminishes or wholly arrests the heart's action.

In pathological conditions a restraint producing irritation of the vagus can be excited at many points, although a direct irritation is uncommon, and an indirect or reflex one much more frequent. The direct irritation is seldom excited in the trunk of the nerve, or in its centre in the medulla oblongata, more frequently in the peripheral ramifications of the cardiac branches in the heart itself. In central irritation the violent further symptoms that are produced, obscure the characteristic signs of vagus irritation. The same occurs also in case of the so-called heart poisons, such as the salts of gallic acid, cyanide of potassium, and others; and in complicated brain disorder, such as concussion and tubercular meningitis. Neuroses of the vagus from a part of the diseases comprised under the vague term, "angina pectoris."

The physiological type of a reflex heart neurosis is furnished by the well known crushing blow experiment of Goltz. In this the irritation proceeds from the sensory
nerves of the abdominal organs. Pathological cases that admit of the same explanation are sudden deaths from concussion of the abdomen, or from the passage of a catheter. To the same category belong many cases of angina pectoris due to irritation of abdominal organs, and attended by lowering of the heart's action, anguish, syncope, cold pale skin, and fallen countenance. So also do the effects of wounds of the intestine, many cases of (especially toxic) gastritis, of nervous gastralgia with lowering of the circulation, of stoppage or intussusception of the bowels with similar symptoms, of colic from biliary or renal calculi, and of peritonitis. The slow pulse of lead colic also depends upon vagus irritation. In all such cases death ultimately depends upon paralysis of the abdominal vascular system, as Goltz, in his blow experiment, has clearly proved. Mention should further be made of certain forms of nervous shock to the heart, with diminution of its functional activity from some abnormal irritation of the genitals, as onanism and hysteria.

2. The restraint neuroses of the respiration.

The physiological facts that underlie these disorders are not so free from doubt as those that relate to the heart; but they are, nevertheless, certain enough. They rest upon the experiments of Rosenthal, which teach that slight irritation of the superior laryngeal nerve diminishes the frequency of the inspirations; that stronger irritation entirely stops them, with relaxed diaphragm and closure of the rima glottidis; and that the strongest irritation produces contraction of the expiratory muscles. In this way cough is occasioned, and, in the higher degrees of irritation, spasmodic cough.

Rosenthal considers the superior laryngeal to be a restraining nerve for the inspiratory movements of the diaphragm. Its excitation is not centrifugal, like that of others, but centripetal; and its restraining centre is certainly not, like theirs, in the peripheral organ, but in the medulla oblongata, so that an analogous direction of action is maintained.

Pathological conditions dependent upon restraint neuroses of the laryngeal nerve are numerous. Prominent among them are spasmodic coughs, both the hysterical (a pure neurosis) and whooping-cough, which the authors hold to be an infectious neurosis. Again, there are the attacks of cough brought on by foreign bodies and by material changes in the air-passages.
3. The restraint neuroses of the intestinal canal.

These have their physiological analogues in the stoppage of the peristaltic movement, and the relaxed state of the intestinal walls from irritation of the splanchnic nerves, as first observed by Pflüger, and since confirmed by others, between the muscular layers of the intestine, and that supplies the intestine with motor fibres. The characteristic of neuroses of the splanchnic nerves is the diminution or arrest of peristaltic action, producing retarded evacuation or complete stoppage of the bowel. These symptoms, however, correspond to those of paralysis of the motor nerves. It is, therefore, difficult in concrete cases, to decide which of the two cases is in operation. Very often there is a combination of both.

An example of irritation of the splanchnic nerves is furnished by the typical symptoms of lead colic, which are pain and obstinate constipation. The first may be very well attributed, in part, at least, to irritation of the splanchnic nerves, since they contain sensory fibres. This irritation may itself strengthen the restraining influence by reflex excitation. The active character and the source in irritation of the costiveness are shown by the familiar therapeutic action of the anti-spasmodics. It would certainly have the same character if caused, as some assume, by spasm of the intestinal muscles; but in such case it could only be reflex, and excited through the attacks of colic, and it would probably only occur periodically, and not occasion constipation of so obstinate a kind.

Besides the attacks of pain, and the relief afforded by anti-spasmodics, the presence of irritation of the splanchnic nerves is further denoted by a similar action upon other restraining nerves, especially the vagus; from which, in half the cases of lead colic, we find marked retardation of the pulse. The distention of the abdomen, again, indicates paralysis of the intestine. The reputed spasmotic contractions are probably only consequences of the pains, and are partly only apparent, and only affect the large intestine, upon which the splanchnic nerves appear to have no restraining influence. They may also be produced secondarily, through the irritation of the mechanically-distended bowel, as we see in cases of internal obstruction.

It is probable that the psychical influences that modify the intestinal movements (as in hysteric meteorismus) follow the track of the splanchnic nerves, although their
centripetal course, beyond the thoracic sympathetic ganglia to the cerebro-spinal centre, is not certainly known.

4. The restraint neuroses of reflex action.

The restraining action of the will upon reflex movements, and their promotion by decapitation, have long been known. Setschenow was, however, the first to determine experimentally the reflex restraining centre in the brain of a frog, in the corpora quadrigemina, and optic lobe. An analogous office is, in the highest degree, probable in mankind. The diseases of this restraining apparatus may serve to explain many spasmodic conditions—such as epilepsy, chorea, tetanus, and paralysis agitans. According to Malkiewicz, we may consider the spasms produced by poisoning with strychnia, alcohol, and opium, to be results of paralysis of the reflex restraining centre, upon which all these substances exert a decidedly paralysing influence.—Wien. Med. Wochenschr., 1866; Schmidt's Jahrbücher, 1866.

The Results Attending the Removal of the First Growth of Cancer. By Mr. John Birkett, Surgeon to Guy's Hospital.

What advantage does a patient obtain in submitting to the removal of a cancerous tumor? The answer which Mr. Birkett gives to this question is too full of interest to be curtailed. He writes:

"The facts upon which to base a reply to this inquiry are derived from the investigation of a hundred and fifty cases carefully recorded by myself; and although I have not always performed the operation, I have seen the patient and examined the growth after its removal. A majority of the patients are dead; for it should be borne in mind that this collection of cases was commenced eighteen years since, and that not a little difficulty arises in being able to follow out patients who survive several years.

"Also, it must be stated, that I have not made any selection of the cases with the view to uphold or support any particular statement. The sufferers who succumbed to the disease were placed in the order in which death occurred, and therefore some allowance should be made in those cases in which death ensued very rapidly after
the development of the disease appearing on the tables in greater numbers than those which survived the same thing many years.

"The above consideration, as well as others, render what are termed statistical tables, and deductions therefrom by means of averages, most fallacious guides to treatment.

"Table A is arranged to show the length of time during which one hundred and fifty patients were free from any indications of the local recurrence of the disease after the removal of the first growth.

A.—Table showing the length of time during which a hundred and fifty patients were free from indications of the local recurrence of the disease after operation.

<table>
<thead>
<tr>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the expiration of the first year</td>
</tr>
<tr>
<td>Between expiration of first year and close of second</td>
</tr>
<tr>
<td>Between second and third</td>
</tr>
<tr>
<td>Between third and fourth</td>
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<tr>
<td>Between fifth and sixth</td>
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<tr>
<td>Between sixth and seventh</td>
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<tr>
<td>Between seventh and eighth</td>
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<tr>
<td>Between eighth and ninth</td>
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<tr>
<td>Between ninth and tenth</td>
</tr>
<tr>
<td>Between tenth and eleventh</td>
</tr>
<tr>
<td>Between fourteenth and fifteenth</td>
</tr>
<tr>
<td>Between fifteenth and sixteenth</td>
</tr>
<tr>
<td>Sixteen years</td>
</tr>
<tr>
<td>Patients died free from local disease in parts first affected (see table)</td>
</tr>
</tbody>
</table>

"Before the expiration of the first year, eighty-seven patients showed signs of a new development of the growth, either in the portion of the mammary gland not removed, the integuments in the neighborhood of the cicatrix, in that structure itself, or in the axillary lymphatic glands.

"After the expiration of the first year, and before the conclusion of the second, fifteen patients showed that a cancerous growth was again developed in one or other of the regions above mentioned.

"Now, this large proportion of the cases in which recurrence occurred, might be taken as a significant fact to demonstrate that the cases submitted to operations were badly selected; that, indeed, an operation was scarcely justifiable. But, in many of the cases, the operation was undertaken in the hope of removing a source of great
local pain and mental distress; of alleviating the misery and to abate the annoyance attending an ulcerated and sloughing surface, and at the earnest solicitation of the sufferer.

"In some, I confess, little, if any, advantages were gained. In others, although life was not prolonged by many months, the existence of the individual was rendered more tolerable, since the attendant circumstances before described were sometimes absent. Life was decidedly prolonged in a few cases, in which it was rapidly ebbing in consequence of repeated hemorrhages and deeply sloughing masses.

"Further, we may be allowed to suggest that many of the cases in this category might have been operated upon at a much earlier period after the discovery of the first growth, and with every probability of a happier result. But, in hospital cases, and a large majority were of that class, it too often happens that patients apply to such institutions as a last resource only.

"We may now turn to a somewhat brighter picture. To be free from such a disease as cancer for periods of time extending between three and sixteen years, is a fact surely sufficient to justify almost any means to accomplish such a desirable end. The risk to life attending the operation is not great, and now much of the horror of such a proceeding is mitigated by the employment of anæsthetics.

"In the wards of a hospital, even where the chances against the recovery of the patient are greater than in private practice, I calculate the death-rate at only seven per cent. During the last seventeen years, two hundred patients have been operated upon by my colleagues and myself in Guy's Hospital. Either the whole or a portion of the breast-gland was removed on account of a carcinomatous growth. All of these recovered from the effects of the operation, with the exception of fourteen, who survived it between three and thirty-six days only. It must be admitted that the operation was more or less the exciting cause of the disease which terminated life. These fatal diseases were erysipelas, followed by bronchitis; inflammation of the pleura, terminating in effusion; pyæmia; hæmoptysis; and vomiting; in fact, the too common causes of fatal complications after operations upon the poorer classes, inhabitants of large cities.
"But in private cases the mortality is so trifling that, admitting the risk to which every person submits who undergoes any operation, I am inclined to calculate it at not more than three or four per cent. I have lost only one patient, of forty-one cases operated upon for cancer.

To proceed with the remaining cases. Of the patients, thirty-three in number, who survived the operation without any local recurrence of the cancer for periods varying between two and sixteen years, assuredly many of them must have died of the complaint within those periods; and all of them would certainly have been compelled to endure the mental anguish, if not the local suffering, accompanying the existence of this terrible malady, assuming that they had survived equal periods.

"Lastly, fifteen of the patients died without showing external signs of recurrence of cancer in the region first affected.

B.—Cases in which the Cancer did not Reappear in the part first affected with that growth.

<table>
<thead>
<tr>
<th>Cases</th>
<th>Survived Operation</th>
<th>Cause of Death</th>
<th>Condition of local disease at operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 months</td>
<td>Hepatic disease</td>
<td>Integuments infiltrated</td>
</tr>
<tr>
<td>2</td>
<td>10 months</td>
<td>Thoracic disease</td>
<td>In same condition</td>
</tr>
<tr>
<td>3</td>
<td>11 months</td>
<td>Hepatic disease</td>
<td>As above</td>
</tr>
<tr>
<td>4</td>
<td>13 months</td>
<td>Carcinoma in calvaria</td>
<td>Mammary gland only infiltrated</td>
</tr>
<tr>
<td>5</td>
<td>15 months</td>
<td>Disease of ovary</td>
<td>As above</td>
</tr>
<tr>
<td>6</td>
<td>2 years</td>
<td>Cerebral disease</td>
<td>Integuments infiltrated</td>
</tr>
<tr>
<td>7</td>
<td>2 yrs. 2 m.</td>
<td>Hepatic disease</td>
<td>Integuments infiltrated and ulcerated</td>
</tr>
<tr>
<td>8</td>
<td>3 years</td>
<td>Thoracic disease</td>
<td>Mammary gland infiltrated only</td>
</tr>
<tr>
<td>9</td>
<td>4 yrs. 3 m.</td>
<td>Cerebral disease</td>
<td>Same as above</td>
</tr>
<tr>
<td>10</td>
<td>6 years</td>
<td>Thoracic disease</td>
<td>Integuments infiltrated</td>
</tr>
<tr>
<td>11</td>
<td>6 years</td>
<td>Cerebral disease</td>
<td>Integuments infiltrated and ulcerated</td>
</tr>
<tr>
<td>12</td>
<td>6 yrs. 6 m.</td>
<td>Exhaustion</td>
<td>Mammary gland infiltrated</td>
</tr>
<tr>
<td>13</td>
<td>6 yrs. 8 m.</td>
<td>Thoracic disease</td>
<td>Integuments infiltrated</td>
</tr>
<tr>
<td>14</td>
<td>10 yrs. 6 m.</td>
<td>Cachexia</td>
<td>Integuments ulcerated</td>
</tr>
<tr>
<td>15</td>
<td>11 years</td>
<td>Cachexia</td>
<td>Mammary gland infiltrated</td>
</tr>
</tbody>
</table>

"The Table B shows the length of time each individual survived the operation. This was between six months, the shortest time, and eleven years, the longest. In another column is stated the cause of death in each case, which was the development of cancerous growths in the viscera of either the cranium, the thorax, or abdomen, as determined by well-marked indications during life or by post-mortem examinations.

"I have introduced, in the same table, as brief a description as possible of the condition of the local disease at the time of the operation; and it should be noted that it had made considerable progress in some of them. The
integuments were infiltrated with cancer; in some, ulceration of the surface existed. Under these conditions, we are justified in assuming that some of the patients would speedily have fallen victims to the ravages of the complaint, and that all must have endured more or less of the suffering accompanying its progressive stages.

"By the removal of the growth, these fifteen patients were exempt from the misery inseparable from the activity of the local disease.

"Let us next inquire if the life of individuals afflicted with cancer of the breast is prolonged by the removal of the part first involved by the disease.

C.—Table to show the number of years a hundred and fifty patients survived the discovery of the disease after the removal of the first growth.

<table>
<thead>
<tr>
<th>Duration</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 year</td>
<td>8</td>
</tr>
<tr>
<td>Above 1 year</td>
<td>24</td>
</tr>
<tr>
<td>Above 2 years</td>
<td>38</td>
</tr>
<tr>
<td>Above 3 years</td>
<td>17</td>
</tr>
<tr>
<td>Above 4 years</td>
<td>21</td>
</tr>
<tr>
<td>Above 5 years</td>
<td>7</td>
</tr>
<tr>
<td>Above 6 years</td>
<td>5</td>
</tr>
<tr>
<td>Above 7 years</td>
<td>10</td>
</tr>
<tr>
<td>Above 8 years</td>
<td>4</td>
</tr>
<tr>
<td>Above 9 years</td>
<td>4</td>
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<tr>
<td>Above 10 years</td>
<td>2</td>
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<tr>
<td>Above 11 years</td>
<td>2</td>
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<tr>
<td>Above 12 years</td>
<td>1</td>
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<tr>
<td>Above 13 years</td>
<td>1</td>
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<tr>
<td>Above 14 years</td>
<td>2</td>
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<tr>
<td>Above 15 years</td>
<td>1</td>
</tr>
<tr>
<td>About 20 years</td>
<td>1</td>
</tr>
<tr>
<td>About 22 years</td>
<td>1</td>
</tr>
<tr>
<td>About 23 years</td>
<td>1</td>
</tr>
<tr>
<td>About 32 years</td>
<td>1</td>
</tr>
</tbody>
</table>

"I have arranged Table C to show the number of years one hundred and fifty patients survived the discovery of the disease after the removal of the first growth. Rather more than one half died before the expiration of the fourth year, or in the ratio of fifty-eight per cent.; the majority dying before the completion of the third year.

"Thirty-three died before the expiration of the seventh year, or in the ratio of twenty-two per cent.

"Eighteen died before the conclusion of the tenth year, or in the ratio of twelve per cent.

"Twelve survived about ten years, or in the ratio of eight per cent. One person lived about thirty years after the discovery of the disease.

"In order to form some comparison between cases subjected to the above treatment, and those in which the disease was allowed to pursue its natural course, with the exception of using local palliatives and constitutional measures, I calculated the average duration of life of a hundred patients.

"Fourteen of these patients died within the first year after the observation of the disease; three survived its
discovery above ten years, two of them having lingered under its slow progress about twenty-six years.

"The average duration of life I believe to be about three and a half years.

"Of the cases, then, which have fallen under my observation, it is quite certain that the longest survivors have been those from whom the first growth was removed.

"Whether the duration of life was really essentially due to the removal of the first growth, I would not venture to assert dogmatically; for there are many collateral circumstances which require to be taken into consideration, for which the time is insufficient upon the present occasion.

"In conclusion, I trust that I have demonstrated to my sceptical professional brethren that a certain proportion of cancer patients can receive benefit by submitting to the removal of the first growth of the disease; and that the benefit derived from the operation is twofold—viz.: 1st, prolongation of life; 2d, exemption from disease for a considerable period of time in many instances."—British Medical Journal.

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On the Employment of Galvanism on Promoting the Cicatrization of Sluggish Sores. By Mr. Nunn, Surgeon to the Middlesex Hospital.

Mr. Nunn records the following cases. In treating ulcerations he finds it indifferent whether an induced or continuous current be used. He has often used Pulvermacher's galvanic chain with advantage in obstinate sinuses.

Case 1.—W. F., aged twenty-three, had benign fungus of the testis, the sequence of strumous abscess. There was a circular perforation of the scrotum on the left side as large as a florin, and it had existed during twelve months. The fungus was about the size of a walnut; there was a free discharge from it of yellowish glairy purulent fluid.

October 12th. Galvanism of weak intensity (from a single cell), to be applied for five minutes every morning. The effect of the galvanism was most remarkable; the fungus receded, and the edges of the perforation contracted over it, after a few days.
27th. A slightly stimulating lotion of nitrate of silver was ordered (half a grain in the ounce of water).

30th. The solid nitrate of silver was brushed round inside the sore, which had now nearly closed; and nitric acid and decoction of bark were ordered to be taken three times daily.

November 6th. The patient was discharged, the sore being quite healed.

Case 2.—H. D., aged five years, was admitted with an unhealed sinus, probably caused by caries of one of the cuneiform bones. The swelling was chiefly on the inner side of the foot, in front of the instep. The tarsal end of the metatarsal bone of the great toe was enlarged. There was the history of a sprain; and the child's parent believed the disease of the foot to be due to the sprain. An incision had been previously made in the part, and some unhealthy bone scooped away by another surgeon. The child had a scrofulous appearance, and its belly was tumid. Mr. Nunn ordered nitric ether in half-drachm doses, with syrup, three times a day—a medicine which he believes to exert the most useful influence in promoting the nutrition of cachectic children, and to have the power of diminishing that distention of the abdomen so characteristic of deficient nutrition from sluggishness of the mesenteric glandular system. Iodide of potassium ointment was also prescribed to be rubbed into the belly. These measures were carried out from January 27th to February 11th, without much change in the appearance of the sinus, when galvanism was ordered to be applied for five minutes three times a week. The effect of the galvanism was at first to diminish the angry redness of the part, and also the amount of discharge from the sinus. By the end of the month the sinus had scabbed over, and the patient was discharged on the 7th of April, convalescent.

Case 3.—Jane D., aged twenty-two, admitted December 12th with angular curvature of the spine. She was healthy up to the age of fourteen years, when she began to suffer from rheumatic pains "all over her." There was at the date of admission an opening in the upper third of the right thigh, about the apex of Scarpa's triangle. Four years since there was some swelling and stiffness of the thigh; two years since, at the seat of the opening, a swelling as large as an egg. The spine projected in the lumbar region; there was some tenderness on either side
Experimental Investigations into the Action of the Bromide of Potassium. By Dr. Roberts Bartholow.

The author's investigations were conducted in three directions: 1st, The chemical properties; 2d, The physiological effects; and 3d, The therapeutical uses of the salt.

The physiological effects of the salt when taken into the stomach, Dr. B. sums up as follows:

"1. It proves irritant in large doses to the mucous membrane of the stomach."

"2. It is rapidly absorbed into the blood, and may be detected soon after in the urine.

"3. It acts upon the nervous centres, producing sedation, sleep, reduces the action of the heart and arteries, lowers the temperature, and diminishes the retrograde metamorphosis of tissue."

The prolonged administration of the bromide of potassium produces, according to Dr. B., the following effects:

"1st. It diminishes and ultimately entirely neutralizes the sexual appetite."
2d. It produces weakness of the muscular system.
3d. It is irritant to the stomach if given in considerable doses; and
4th. It interferes with the secondary assimilation, lessening the retrograde metamorphosis of tissue.

In regard to its therapeutical uses, Dr. Bartholow extols it as a disinfectant and deodorizer, as an escharotic in sloughing and gangrenous ulcer, phagedenic chancre, hospital gangrene, epithelioma, etc.

"The actions of the bromide of potassium, physiologically considered," Dr. Bartholow states, "consists in a sedative or contra-stimulant effect upon the nervous centres, producing as secondary phenomena, sedation of the heart, anaemia of the brain, anaphrodisiac effects, and diminution of the retrograde metamorphosis of tissue. It has come into use in various functional and organic nervous disorders, and in certain sexual diseases where a calmative and sedative influence is desired."

This salt Dr. Bartholow considers to be indicated as a hypnotic in states of nervous excitement without congestion of the nervous centres; in hysterical insomnia; in delirium tremens; in the insomnia of excitable business men, or, in general terms, in those forms of insomnia dependent upon excitation without increased blood supply. He has found it especially useful in irritable bladder, and the chordée of gleet.

From a careful survey of all the facts, Dr. Bartholow gives the following as the methodus medendi of the salt in question:

1st. The bromide of potassium acts by absorption into the blood.
2d. Its effects are expended upon the nervous centres, or the cerebro-spinal axis.
3d. Sedation of the heart and circulation, and the various local sedative effects are secondary results of the impression made upon the nervous centres.
4th. Its physiological effects are not very decided, and are easily modified by any local disturbance.
5th. Its therapeutical action is still more decidedly influenced by local morbid processes.
6th. It is indicated where a sedative to the nervous system is required—in insomnia; in great reflex excitability; nervous and spasmodic affections of the larynx and bronchi, sexual excitement, and in an irritable state of the sexual organs.
"7th. It will be effectual in the foregoing conditions, in proportion to the degree in which structural lesions are absent, or, in other words, in proportion to the degree in which these morbid states are functional rather than organic."

The bromide, Dr. Bartholow asserts, possesses none of the peculiar alterant properties of the iodide. Whilst this fact is true, it is undoubtedly the case that the bromide relieves the congestion of certain organs, diminishes their bulk, or, as it may be styled, produces resolution of an engorgement. Such action, apparently alterative or resolvent, is not really so. It has been exhibited mainly in certain states of the uterus and ovaries—states of hyperemia dependant upon sexual excitement, or upon the monthly nisus. The apparent resolvent power is, in this case, due to the sedative impression of the remedy upon the sexual organs and upon the vaso-motor nerves.

—Cincinnati Lancet and Observer; American Journal of the Medical Sciences, January, 1866.

How to Examine and Syringe the External Ear. By A. D. Williams, Cincinnati.

The reason why we can not see down to the bottom of the ear, is because we "always stand in our own light." When our eyes are placed in a proper position for looking in the ear, our heads cut off or prevent the entrance of light from without. Hence, the first thing to be done in order that we may examine the external meatus, is to illuminate it. The principle by which we light it up is precisely the same as in the illumination of the eye, that we may see its fundus. As to the source of light, we may use either the direct sun-light, common gas-light, coal oil lamp, or the light from a small window that looks out, not against another building, but into free space, toward the clouds or sky. Such a light affords perhaps the best light, but either of the other three sources may be employed very well. The direct sun-light makes the ear feel quite warm when thus concentrated upon it, and if used for a considerable time, might even burn it. The gas or lamp-light makes the membrana tympani look redder than natural, and might even lead to deception from this fact.
Before whatever source of light we choose to use, or have at our command, we place the patient with the ear to be examined turned away from it. His head is inclined a little forward and toward the light. A speculum (Grun-ber's or Toynbee's) is introduced gently (in all manipu-
lations with the ear, gentleness is the first law) down as far as it will go into the meatus without pain. The speculum corresponding exactly with that of the meatus. It is now held in position by the left hand. In the right hand the surgeon takes a mirror (three inches in diameter and six inches focus), made expressly for illuminating the ear, and throws the light through the speculum into the bottom of the aural canal. In the centre of the mirror is a little hole, similar to that in the ophthalmoscope. Placing his eye behind the mirror and over this small opening in the same, the operator looks through it, down to the bottom of the ear, just as we look into the eye with the ophthal-
moscope. In this way the whole outer ear is thoroughly lighted up, and we are thus enabled to see and examine all its natural structures most minutely and most per-
factly. If we wish we may magnify them simply by holding a convex glass, No. 3 or 4, before the speculum; but this is rarely necessary, even for the most perfect examination. It enables us to see and judge of things deep down a little better than without it.

The old method of examining the ear by letting the sun-light fall directly into the speculum was rather im-
pactible and quite unsatisfactory, for the simple reason
that its natural structures could not always be distinctly
seen, besides the sun-light was not at all times to be had.

The above described method of illumination by means
of the mirror, first introduced and practiced by Dr.
Troelch, of Wurtenburg, is very far superior to it in con-
venience and distinctness, and should be adopted by every
one who, for any purpose, examines the ear. I will not
just here describe in detail what is to be seen in the
external meatus. I take it for granted that every one
knows what is to be found there, and can easily dis-
tinguish what is pathological and what is natural.
I therefore pass to the second part of the subject—

HOW TO SYRINGE THE EAR.

The more common anything is the more it deserves to
be noticed. This is my only apology for introducing such
a common topic.
The meatus auditorius externus is the way or tube that leads down to the bottom of the external ear, that is, down to the membrana tympani, which is the partition wall between the outer and middle ears. Its general course is inward, a little downward and forward, but not in a straight line. There are several minor deviations from a straight line, but only one that deserves special mention in connection with syringing the ear. Practically considered, the anterior and posterior walls may be regarded as straight; the upper makes perhaps a very small gradual curve with the concavity looking downward. The lower wall makes a decided angle, a little beyond its middle, with the angular point projecting into the meatus from below, and corresponding, to some extent, with the general concavity of the upper wall. The direction of the inner portion of the lower wall is such that it makes, with the membrana tympani, quite a pocket at the bottom and lower portion of the meatus. In order that a stream of water may reach thoroughly the bottom of the ear, it is necessary first that the way that leads to it be straightened as far as possible. For this purpose take hold of the auriculum, or external portion of the ear, and draw it pretty firmly directly upward, and in this way the upper and lower wall are brought as nearly as possible into straight lines. Holding the ear in this position with the left hand, take the syringe in the right and inject the water gently, yet with a little force, into the ear, directing the point, which should be introduced a little into the external orifice of the meatus, inward, a little downward and forward in the general direction of the tube. Of course a cup must be pressed against the face, beneath the tragus, in order to catch the water as it escapes. It is recommended to have two cups, one to contain the clean water to be injected, and the other to catch it. The best syringe for the ear that I have ever seen, is what is known as the ear syringe, made of gutta percha, which is very light and very convenient, as well as durable. The syringing operation is to be continued till its object is attained, which is always cleanliness.

Better use simple warm water, without any soap, which is supposed to irritate considerably. It may be repeated as often as necessary for the attainment of the object in view. Some persons are not affected at all by syringing the ear, while others, who are in perfect health and who are anything else but nervous, faint from it.
It sometimes has a very peculiar effect upon the nervous system. In consequence of syringing the ear, stout, robust men reel and stagger like drunken men, and sometimes even fall flat upon the floor. If ladies should tumble over in this way, and from such a cause, inexperienced persons might be swift to call them *hysterical*. But the imputation would be false, for there are no hysterics about it. Then be careful how you make such charges against women, for men sometimes faint from the same cause.—*Cincinnati Lancet and Observer*.

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*Treatment of Opium Poisoning by a New Method.* Read before the Norfolk District Medical Society, May 9, 1866, by A. LeB. Monroe, M.D., of Medway.

I was called in consultation to the wife of a clergyman, a lady about forty-four years of age, who was in a state of ultimate narcosis from laudanum. She was insensible upon her bed some three hours previous. Her family physician, Dr. H., was called, and immediately commenced a series of efforts to restore consciousness. A two-ounce vial, which had contained laudanum, was found in the room empty. After her recovery, she said that she procured two ounces of laudanum of a respectable apothecary, and about four o'clock p.m., she took nearly one half of it, and the remainder about half an hour afterward. Emetics of sulphate of zinc, ipecac, etc., had been given without effect. Powerful irritation of the surface, tickling of the fauces with a feather, etc., had been employed without any improvement; on the contrary, she was sinking, or had sunk, into a hopeless state. The pulse very slow, not over forty-five, and very weak, soft, and irregular. The respiration extremely infrequent and stertorous, with frothing at the mouth. The skin was cold and clammy; face pale and cadaverous; in fine, she was in a state of profound *coma*, which was apparently soon to end in death. The stomach pump had not been used. I applied it and drew off the contents of the stomach, which had a strong smell of laudanum. The operation of passing the tube and thoroughly washing out the stomach did not rouse her at all. No galvanic battery could be had, and if it could have been obtained, I should have applied it with little confidence in its power.
to restore the patient. Dr. H. and her husband regarded the case as hopeless.

Years before I had read a book which gave some account of the tortures of the Spanish Inquisition, and among them all there was one which was represented as causing to the miserable victim an agony more intense and excruciating than any other method that could be contrived by those devils incarnate. It was the dropping of cold water, from the height of several feet, upon the naked pit of the stomach. I determined to see if the method used by inquisitors to torment and kill heretics would not save the life of the wife of a Calvinistic preacher. I proposed it to him and Dr. H. They assented, with little faith in its success.

We placed her upon her back on the floor, with her head elevated a little upon a folded sheet; slipped her clothes down below her waist, leaving the chest entirely naked. A pail of cold water and a pitcher were brought in. I placed myself in a chair, and raising the pitcher, filled with water, to the ceiling, eight or nine feet from the floor, I allowed the water to fall in a small stream upon the epigastrium. By the time the first pailful was exhausted, the breathing had evidently become a little more frequent and equable, and the stertor less. The second pailful was brought in, and soon, to my great joy, I could see that the deathly pallor of the face was being lighted up by the flow of the vital current from the heart. A blush, barely perceptible at first, gradually and steadily spread over the before pale and expressionless features, until it warmed into the full glow of life and health. (My feelings at this stage of the proceeding must have been, in some respects, not unlike those experienced by Pygmalion when his beloved statue of ivory began to live and breathe under his warm embrace.) By degrees other manifestations of returning life appeared. She began to make efforts to move away from the pouring stream, weak at first, but increasing in power, until she could turn partly over and interpose her hands to break the force of the stream. At length, after about three pailsful of water had been used, her struggles to escape from what was now evidently torture, was quite severe; and about this time, to our infinite satisfaction, she began to beg for quarter in long-drawn, drowsy syllables, increasing in energy and force, until they were uttered in a tone and manner which evinced a considerable degree of
passion, and even anger, at the strange and cruel treat-
ment to which she was subjected. But even now she
would fall asleep immediately if let alone. Having con-
tinued it as long as we thought it necessary, we desisted,
and rubbed her dry with warm cloths. We then raised
her up and walked her about the room, or rather about
an adjoining room, which was dry, for an hour or more,
resting at intervals. This was no easy task, for she was a
full, well-developed woman, weighing one hundred and
forty or one hundred and fifty pounds. She would beg
piteously to be let alone and to lie down, and in spite of
us she would often slip from our hands upon the floor.
This forced exercise was continued until we deemed it
unnecessary. She recovered without any permanent ill
effect. It was the last attempt she made to destroy her-
sel. She had been subject to periodical fits of insanity,
in consequence of some catamennial derangement. She
has had no return of insanity since then, and has lived a
blessing to her family and society.

The methodus medendi in this case will not be difficult to
understand, when we consider the anatomical and physi-
ological relations of the parts immediately and mediately
impressed by the cold stream of water. The pit of the
stomach is one of the most sensitive portions of the body;
it has a peculiar sensibility, which will not tolerate even
a slight blow without suffering. The semi-lunar ganglion
and great sympathetic, with its extensive and important
connections, is powerfully excited, and the over-charged
heart is roused to action by the direct and reflex nerve
force. The effect is compounded of shock, to an extreme
degree, and a permanent powerful excitation of the vis
nercosa, causing more or less intense pain and distress,
derpendent on the length of time it is applied. The heart
is compelled to contract and send forward its dark blood
to be aërated in the lungs, and then to be distributed over
the whole system, carrying life and activity to all its
functions. Galvanism could do no more. Indeed, I do
not believe it would do as much. Besides, a battery is
not always to be had, while water is always at hand, and
if applied as in this case, I believe it will be more
effective in the cure of extreme cases of opium poison-
ing than anything else. Doubtless it would be as effectual
in poisoning by other narcotics, and possibly in some
cases of suspended animation.—Boston Medical and Surg.
Journal.
A Brief Description of what appears to be Two Newly-Discovered Skin Diseases; one originating in the Cat and the other in the Dog. Both Cryptogamic and Contagious, and both capable of being transmitted from the Animal to the Human Body. By J. H. Salisbury, M. D., Professor of Histology, Physiology, and Cell Pathology, in Charity Hospital Medical College, Cleveland, Ohio.

1. Trichosis Felinis.—This is a skin disease originating in the cat, and readily transmissible to the human subject. It resembles in appearance trichosis furfuraceae, and, like it, has a cryptogamic cause. It is produced by a species of fungus that develops in the fermentation of cat’s milk. It develops on kittens while nursing; first around the lips, nose, face, and eyes, and spreads to the head and body. It forms, with the epidermic cells, circular patches of thin rusty scurf on the face, nose, lips, and head. The hair soon sickens, curls up, dies, and crumbles away, and the eyes become sore and gradually close. Often the eyes become entirely shut. After nursing ceases, this growth gradually disappears. It often lasts, however, two or three months, and may be longer, after weaning.

This disease is contagious, and is readily transmissible to the human subject from the kitten, and from one person to another. It is contracted more readily by young children than by grown persons, yet it is readily contracted at all ages. On infants and young children it spreads rapidly, attacking all parts of the body alike. It spreads rather more rapidly on the hairy than on other parts of the body. The plants attack the hair follicles, in which they develop luxuriantly, sending off branches abundantly through the epidermic and cuticular layers. The spores and filaments of this mucidinous growth resemble those of trichosis furfuraceae. They however develop much more rapidly on the human body, causing the disease to spread in isolated patches to all parts of the surface often in a few days’ time.

The patches on the scalp do not differ materially from those of ordinary trichosis furfuraceae, save that the surface is, perhaps, slightly more raised and inflamed, and produce more irritation. On parts of the body not covered with hair they spread less rapidly, starting from a single point or hair follicle, and extending in all directions, forming circular and oval patches of greater or less
size. The patches are slightly elevated above the surrounding surface, red, and covered with scales and little elevations marking the position of the hair follicles. The color of the patches is deeper, and the irritation and itching more severe than in ordinary trichosis.

In less than a week after a kitten affected with this disease comes in contact with a child, the eruption begins to show itself upon some parts of the surface of the latter, usually about the hands, arms, and face, especially if the child has been caressing the kitten. Soon after, patches appear on the limbs and body and rapidly spread, producing an intolerable itching, which is only partially relieved by rubbing and scratching the patches. This is purely a local disease, it being contracted alike readily by the healthy and diseased.

Pathology.—The cells of the hair-follicles, and of the epidermic layer between them, are shrunken and shrivelled, and the hairs, diminished in size, become brittle, and break off and crumble away. The deeper parts of these follicles become enlarged often, and the hairs die, shrink, and fall out.

The capillary vessels in the papillary layer of the skin beneath the diseased surface become congested and enlarged, producing a reddening of the skin and a slight elevation of the diseased surface. The epidermic cells of the follicles and plane surfaces are robbed of their nourishment, become diseased and shrivelled, and finally die and fall off in dry scales. Frequently the irritation is so great that pus is formed in little vesicles, which become broken by scratching.

Cause.—The cause is purely local, and has nothing necessarily to do with constitutional derangement. It is simply a fungus, a mucidinous growth, that develops primarily in the epidermic cells saturated with the fermenting milk of the cat, which, during nursing, becomes smeared over the faces of the kittens. It does not appear to be readily transmitted from the kittens to the old cat. It does not appear, so far as at present traced, to be a disease prevailing to any great extent among cats, save during the period of nursing, and from one to three months succeeding. This plant is unlike the species that develops in human milk. For the purpose of distinguishing it I have given it the specific name, Felinis. This fungus finds a fit soil for its growth in the skin of persons of all ages. The cells of the epidermis, however, of the
young are more tender, and better supplied with nourish-
ment than those of the mature and old. Hence this
disease more readily attacks, and more rapidly spreads
over the surface of the former.

In ordinary ringworm (*trichosis furfuraceae*), the fungoid
cause exists mostly in the spore state. The plant does
not advance beyond its cell condition. Its growth seems
to be confined simply to cell multiplication by pullulation.
In this disease the plant cells multiply by pullulation, and
these advance to the filamentous stage of growth. These
filaments are found running through among the cells of
the epidermic layer.

*Treatment.—* This being a disease produced by a crypto-
gamic cause, any substance which retards the growth of,
or destroys this kind of vegetation, becomes a more or
less useful remedy. Among the agents of this class may
be mentioned tr. ferri chloridi; tr. iodini; dilute sul-
phuric acid; dilute nitric acid; dilute hydrochloric acid;
dilute nitro-muriatic acid; ointment of the per nitrate of
mercury; dilute ointment of per nitrate of mercury,
made with cod-liver oil; creosote; solutions of sulphu-
rous acid; solutions of soluble sulphites; strong solutions
of quinia, etc. In short, all anti-fermentative substances;
or, all those bodies that prevent yeast from exciting fer-
mentation in saccharine and farinaceous materials, or that
tend to prevent animal tissues from undergoing fermen-
tative changes, become useful remedial agents in diseases
caused by parasitic fungi. Under ordinary circumstances
this plant, probably, will not grow upon the healthy body.
It is quite likely that it only becomes capable of develop-
ing in such situations, after becoming animalized—so to
speak—by developing either in the dirty or milk-smeared
and saturated epithelial tissues of the cat.

One of the most ready remedies for perfectly eradi-
cating this eruption is the tr. ferri chloridi. This should
be painted over the eruption. A single thorough appli-
cation will most generally destroy completely the vegeta-
tion, and effect a cure. The application of tr. ferri is
attended with considerable pain in persons of thin and
tender skin. When the patient is not willing to endure
the smarting of this remedy, others of a milder character
may be substituted. On young children, the oint. of the
per nit. of mercury, made with cod-liver oil and the dilute
citrine ointment, will be found excellent remedies. The
mineral acids, when used, should be sufficiently diluted,
so as not to cauterize, or produce too much irritation. They may be painted freely over the diseased surfaces morning and evening. A few days' application will suffice to effect a radical cure.

2. Trichosis Caninis.—This is a skin disease, affecting dogs. The eruption begins by a small pustular elevation, covered with epithelial scales; other little pustules appear around this, and, beyond these, others soon arise. In this way the disease gradually extends in all directions from the starting-point, from follicle to follicle, producing circular and oval patches elevated above the surrounding healthy surface about one line, and covered with dry epithelial scales, rolled and twisted up. The patches extend, and have a shape like that of *trichosis furfuracea*, on the human subject. Like the last-named disease, this is cryptogamic. It is produced by a parasitic mucedinous growth, which develops among the epithelial cells of the epidermis, passing down among the cells of the hair, sweat, and fat follicles of the skin, depriving them of nourishment. This causes them to sicken, shrivel, and dry up, die, become detached and fall off in dry scales. The cells from which the hair is supplied with food and cell elements becoming diseased, the hair becomes imperfectly nourished, shrivels up, dies, and falls from the follicles. This disease attacks all parts of the surface of the dog. Young dogs are more susceptible to it than old ones; yet no age is exempt. It resembles closely the *trichosis felinis* of kittens; but appears to differ from it in this particular, to wit: that the fungus appears more luxuriant, large, and is more confined to its filamentous stage of development. It attacks less the hair follicles than the felinis, and extends more generally to all parts of the epidermic cell surfaces.

These diseases may, however, be both produced by the same specific cause, the difference arising mainly from the difference in the animal cell surfaces in which they are developed. On account of this and other characteristics, I have designated these diseases by two distinct names. The development of these two growths, to their fruiting stage, will alone settle the question as to the identity or difference of the cause in these two diseases. This part of the investigation is now in progress, and I hope to soon be able to say positively whether there is or is not a difference as to cause between these diseases.
Pathology.—The cells of the epidermis, deprived of their normal nourishment, become shrivelled, dry, and smaller in size, and separate from each other to a greater or less degree. This drying and separation of the cells causes the diseased surfaces to rise above the surrounding healthy parts, the dead, dried, and curled-up cells separate and fall off, presenting a bran-like appearance. The cells of the hair follicles are affected in the same way as the plane surfaces; the hairs sicken, become small and shrivelled, die, and fall from the follicles, leaving the surface bare and inflamed.

Cause.—This is purely a local disease, produced by the development of the cells and mycelium of a mucidinous fungus among the cells of the epidermic layer of the skin. The mycelium is found developing more abundantly than the cells. The mycelium sends out filaments in all directions, branching and rebranching, forming a close network in the cell layer. As the fungoid filaments extend in all directions from the starting-point the disease extends. The development of this fungus deprives the epidermic cells both of the plane surfaces and the follicles of their nourishment. This causes them to sicken, die, shrivel up, separate, and exfoliate.

Treatment.—This disease is readily cured by the application of the tr. ferri chloridi. A few applications suffice. One application each day is sufficient. After several applications of the tincture, it may be well to apply the dilute citrine ointment, morning and evening, till the surfaces become soft and healthy. The mineral acids, the soluble sulphites, creasote, and all anti-fermentative substances, are curative agents in this disease.

This disease is transmissible to the human subject; but, so far as examinations and investigations have at present gone, it is much less readily communicable than the *trichosis felinis*. It is much more readily transplanted upon children than upon the mature and old.

It attacks all parts of the body alike readily. It usually, however, first attacks the hands, arms, and face; other parts of the body being more or less protected with clothing.

History of Investigations.—Without troubling the reader with the tedious details of the investigation, I will here briefly state that this disease was first noticed by myself to be peculiar in the summer of 1864, while treating it in
an orphan asylum, where some thirty small boys were affected with it. During the following year quite a number of cases of the disease were under my care. It was not, however, till July and August, 1866, that I commenced studying the disease with the view of tracing its source.

I had noticed that in most families where it prevailed, the children were playing with kittens that had diseased faces. On comparing the mucedinous growth on the kittens with that on the diseased children, they were found to be apparently identical in the shape of the spores, and in the arrangement of the epidermic cells. My next experiment was to procure a number of diseased kittens, and distribute them to families where there were no cats, and where the children were all free from the disease. In every instance, in from five to ten days after the children began playing with the diseased kittens, they commenced breaking out with this eruption. The next step was to inoculate myself with the spores of this fungus from the cat. In about three days they began to develop rapidly, and send out filaments in all directions among the epidermic cells, producing a disagreeable itching, and forming circular and oval patches of eruption precisely like the disease previously described. The eruption yielded readily to treatment.

I now inoculated myself with the spores from the patches of eruption on a healthy child, to whom I had given, about two weeks before, a diseased kitten. The characteristic eruption followed, extending in all directions from the points of inoculation. Many other experiments were made, connected with the disease, both on the cat and dog, a detail of which would be here uninteresting and unnecessary.

Without further comment or apology this brief description is offered to the profession, hoping the subject may be of sufficient interest to induce others to make investigations in the same direction.—Am. Jour. Med. Sciences, April, 1867.

Herpes Circinatus from Favus in the Cat.

Dr. Tilbury Fox exhibited to the Pathological Society of London, November 13, 1866, several specimens of parasitic fungi sent to him by Dr. Purser, of Dublin—one from a favus patch on the paw of the cat, the others
from herpes circinatus (tinea circinata) of the arm produced by inoculation with the fungus (achorion) from the favus of the cat. It appears two cats were affected by favus, the one already mentioned, and a second about its nose; attempts were made by one of the ladies in the house to rub off the crusts from the diseased places in these cats, and very shortly afterward tinea circinata showed itself about her hands, arms, and shoulders; three other inmates (females) were similarly attacked. The disease was most carefully diagnosed, and not a feature of favus showed itself. Dr. Purser then inoculated his own arm, and produced what was pronounced to be tinea circinati (herpes circinatus); he sent some of the scales to Dr. Fox, which were exhibited. There was an absence of spores, but mycelial threads were very abundant. They were smaller, less branched, and more devoid of granules than the achorion-tubes, characters which belonged to trichophyton. The cases were interesting as showing that favus may give rise to other forms of parasitic disease, a view which Dr. Fox holds against many authorities, and he remarked that DeBury's recent experiments show conclusively the difficulty of getting an interchange of characters between varieties of the same fungus.—*Med. Times and Gazette*, Nov. 17, 1866.

[The above statements are to a considerable degree confirmatory of the researches of Professor Salisbury, related in the present number of this journal, pp. 379–383. It is but justice to Dr. Salisbury to say that his paper was sent to us early in November of last year, and was intended for the January number of this journal, but in consequence of the impossibility of having the wood cuts done in proper season, it was laid over till the present number.—*Ed. Am. Jour. Med. Sciences*, April, 1867.]

*Therapeutic Effects of the Bromide of Potassium.*

Dr. James Begbie in an interesting article (*Edinburgh Medical Journal*, December, 1866), states that after some years’ use of the bromide of potassium he has become satisfied of its great value in the treatment of many diseases, but more especially in disorders of the nervous system, affections of centric origin, or of remote parts through reflex action.
1. He asserts, and this assertion can be confirmed by all who have employed the bromide of potassium, that it is a valuable sedative and hypnotic, and it will often tranquilize when narcotics fail. A dose of from twenty to thirty grains dissolved in a wineglassful of water, or of orange-flower water, given at bed-time, repeated in the morning, and persistently employed for days or weeks, will often produce tranquillity in the sleeplessness during convalescence, and after surgical operations.

"2. In those distressing nervous affections, the offspring of overtaxed brain, which we are ever and anon called upon to combat in the case of the earnest student, the plodding man of business, or the speculating merchant, cases where, by rising early and sitting up late, neglecting regular hours of diet, and abandoning exercise in the open air, the whole machinery of life and health have been deranged, and the unhappy victims contemplate nothing short of the wreck of mind and body: in these circumstances, next to rigid hygienic rules imposed by the physician, and carefully carried out by the patient, will be found the amelioration and ultimate removal of the evil, in the use of remedies which have a calmative effect upon the nervous system. Of these the bromides, in my experience, are the safest and the best. * * * Associated with the cerebral disorder of giddiness and sleeplessness, we often find perversion of the external senses, such as rushing, ringing sounds in the ears, etc. These I have found to be quelled and silenced by the use of the bromide, which may be successfully administered in all cases of hyperesthesia."

3. In that distressing nervous disorder brought on by masturbation, he has repeatedly satisfied himself that the remedy in question is a trustworthy agent.

4. In various shades of epileptiform disorder, and even epilepsy itself, resulting from the nervous condition brought on by the practice just alluded to, Dr. B. states that the bromides exercise a powerful influence. Dr. B. has never seen any evil result from its long continuance; the system acquires a tolerance of its employment.

5. In acute mania and delirium tremens he considers that for procuring calmative and sedative effects, the bromide will be found safer than opium, antimony, aconite, and digitalis. "I have seen," he states, "in two recent cases of violent maniacal excitement, a dose of thirty grains of the bromide of potassium, administered
every second hour, reduce to quietness the restless subjects, and lay them down in sleep, of which they had for days been deprived. I have not much experience of the remedy in delirium tremens, but I know that it is now on this trial, and I entertain little doubt that it will be successful. In one case its use has been followed by satisfactory results, quickly calming the agitation and excitement, and inducing sleep. In nymphomania, the bromides have been employed with marked success, and Dr. James Struthers informs me that he has obtained most satisfactory results from the administration in puerperal mania. This experience is confirmed by that of other physicians engaged in obstetric practice. In melancholia, attended with fixed delusions and great restlessness, I have found the bromide a powerful calmative."

6. In several affections of the larynx and bronchi, which there is reason to believe have a cerebral origin, or, at least, an intimate connection with the nervous centres, as hooping-cough, laryngismus stridulus, spasmodic croup, and spasmodic asthma, he has found the bromides to possess anaesthetic powers not inferior to any of the narcotics. In spasmodic asthma, Dr. B. has obtained the most satisfactory results from the employment of the bromides. "In two cases of long standing, which had resisted all approved methods of treatment, and where the patients had renounced all hope of benefit from drugs, the use of the bromide of potassium in full doses, night and morning, was followed by a remarkable remission of the fit—the patient in one case having slept for several consecutive nights without the return of the asthmatic paroxysm, a circumstance which had not occurred for years. In the second case the result was equally satisfactory."

7. Dr. B. has found the bromide useful in certain cases of vomiting, and in other affections in which the gangliionic nervous system is disturbed.

8. Considering the nervous element present in diabetes, and the sedative effects on the nerves of the bromide of potassium, Dr. B. was induced to hope for beneficial effects from this salt in that disease, and he briefly relates four cases in which it had been employed. "These cases," he remarks, "sufficiently show that there are forms of diabetes in which the functional derangement of the liver, and the production of sugar, are arrested by an agent whose operation is that of a sedative to the
nervous system. It would be premature at the present moment to speculate on the amount of success that may attend the exhibition of the remedy in the varying circumstances in which the disease presents itself.”

“9. The phenomena of cholera, in its earlier stages,” Dr. B. remarks, “point to its intimate connection with disorder of the ganglionic system of nerves, with irritation of the nerve-centres and vaso-motor nerves, and with spasm of the capillary vessels, and obstructed circulation. To arrest this condition as early as possible seemed a clear indication of treatment; and the bromide of potassium, as possessing decided power in allaying irritation of the nervous system, and of relaxing spasm of the muscular fibre, was proposed by me as a possible means of allaying at least some of the more urgent symptoms of the disease. It was introduced into practice upon no empirical ground, and with no expectation that it was to be found a cure for the disease. The very first trials of it in the Leith Cholera Hospital were such as to justify the confident hope that it would be found useful; and its subsequent employment there, as well as in the Edinburgh Cholera Hospital, has not disappointed expectation. In the two institutions named, the former under the superintendence of Mr. Niven, the latter under that of Dr. Stevenson Smith, and also in private practice, I have had many opportunities of witnessing its effects, and am now prepared to say that the bromide of potassium, though not possessing the properties of an antidote to the poison of cholera, though not a specific to the shock of this terrible disease, has certainly stript it of some of its terrors.”

10. In the treatment of the nervous element in fever, we have, Dr. B. says, in the bromide of potassium an excellent substitute for opium, and antimony, henbane, camphor, and other sedatives. “A sufferer from quotidian ague, after large and repeated doses of quinia during the interval, had his regular accession of cold, and hot, and sweating stages unaffected by the specific. The sweating stage was usually protracted and exhausting, and at the end of a fortnight no mitigation was effected. He was advised to take a full dose of the bromide of potassium every three hours during the remission, and, with one imperfect paroxysm, he got quit of his malady.”
11. In obstinate cases of neuralgia, which have resisted the usual remedies, "when no palpable or suspected organic mischief gives rise to the want of success in the use of well-tried and approved remedies, and when no constitutional diathesis stands in the way of well-directed skill to overcome; in those anomalous forms of neuralgia let me ask a trial of the bromide of potassium. It will, now and then, in its own gentle way, reprove the employment of the more heroic treatment which had anticipated its use, and demonstrate that a calmative, in such cases, frequently succeeds better than a counter-irritant."

12. Lastly, Dr. B. has tried the bromide in two cases of "exophthalmic goitre" with the effect of calming the system, though without curing the disease.

Dr. B. has used a gargle composed of one ounce of the bromide of potassium in a pint of water in irritable sore throat with marked advantage.—Am. Jour. of Medical Sciences, April, 1867.

EDITORIAL AND MISCELLANEOUS.

[The following "Suggestions" having been received too late to be inserted among the original communications of this issue of our Journal, we take the liberty of presenting it to our readers in this place, in order that it may prove useful to those engaged at this season in the preservation of medicinal plants.—Ed.]

Suggestions on the Preservation of Plants and Vegetable Substances. By George W. Rains, M.D., Professor of Chemistry and Pharmacy in the Medical College of Georgia.

The usual method of preserving plants and flowers for pharmaceutical purposes, by drying them in hot chambers, and afterwards storing them in boxes or cases of tin or wood, or in glass or earthen jars, is open to several
objections as commonly performed. Too often but a remnant of the more delicate odors and flavors remain after the process is completed, and even this is mainly lost after being kept for a few weeks or months.

It is well known that the actinic or photogenic rays accompanying light have a strong effect in producing chemical action, and hence many vegetable colors are speedily injured by exposure to too much light. This, whilst it stimulates and is altogether necessary for the growth of the plant and formation of its odors and active principles, produces in many cases the reverse effect after the vegetable has been deprived of its vital forces. This is a fact more or less familiar to all, hence it is evidently necessary to properly preserve vegetable colors and properties that the plants or substances should be as far as practicable excluded from light.

To dry flowers and plants in the sun's rays would be obviously wrong, whilst if dried in the shade, or in a cool room, there is too much time for chemical action in the juices, producing a material change of properties in many cases.

A dark hot chamber is certainly better, but in this case a considerable loss of the more volatile substances is experienced.

Probably the most perfect drying arrangement is that used in the chemical laboratory for desiccating compounds which would be injured by heat, viz.: being placed into glass vessels over dishes of strong sulphuric acid in a vacuum.

In case an air pump is not at hand, then the plants might be placed in a close box having the dishes of acid at the bottom, the whole being kept at blood heat. Quick lime may be employed in place of the acid, but the latter is preferable from its stronger absorbing power for watery
vapor, and not being injured by the operation, becoming only slightly diluted, there is no loss in the process.

After the vegetable substance or plant has been thoroughly dried, it should be immediately excluded from air and light as perfectly as practicable; to effect this in the best manner, requires some consideration. By exposure to air not only is there a slow volatilization of the aroma of essential oils, but also there is a gradual combination with the oxygen of the air to the detriment or destruction of some of the most valuable properties.

Packing closely the dried substance in a glass vessel or tin box, would in general answer, if it were left undisturbed, but if portions be wanted for use from time to time, the case must necessarily be opened and an air space left above the article, which becomes larger and larger as more is abstracted; hence the exclusion from air in such case is a failure.

The packing box or envelope should evidently be of such a nature or construction as to be able to accommodate itself to the decreasing bulk of material as portions are taken for use, and thus prevent a vacant air space being left.

I have found an excellent envelope in the common India rubber cloth, which seems to answer all the requirements remarkably well—excluding effectually both air and light, as well as accommodating itself to the decreasing volume of the dried substance as portions are used, and allowing ready access to the material. Through its agency I have succeeded in preserving even the very delicate aroma of parched and ground coffee berries for several months without material loss, and can strongly recommend its general employment for such purposes.
ERRORS IN RELATION TO LIVER COMPLAINTS.

To attribute a great variety of symptoms to affections of the liver is one of the commonest errors of the age. "My liver is out of order," is one of the first announcements made to the physician who asks his patient "what is the matter?" The liver is held accountable for headaches, pains in the shoulder, sides, back, and limbs; dyspepsia, diarrhoea, dysentery, constipation, foul tongue, coughs, etc., etc. A very sensible lady consulted me the other day for her child who had an ordinary sore throat, and insisted upon being permitted to administer a dose of calomel, for she knew that the child's "liver was out of order," and that nothing else would relieve it. Upon being asked how she knew that the liver was out of order, she promptly replied that she knew it because the child had a foul tongue and no appetite! A gentleman brought me his son, about seven years of age, and stated that he had called to get me to decide what was the matter with the boy. He knew that his son either had worms or that his liver was out of order, for he was puny, did not rest well at night, and had withal symptoms of St. Vitus' dance. He had intended to administer a dose of calomel, "for that is good for the liver as well as for worms;" but his wife had persuaded him to consult me, and he, as a dutiful husband, had yielded to her request. A physician of standing seriously declared to a gentleman who was prematurely grey, that this was due to the fact that the liver was out of order, and that if he would take a few large doses of calomel his hair would cease to turn white. The gentleman being in perfect health, and not overly fond of physic, preferred to remain as he was, and
science has accordingly been deprived of the result of so interesting an experiment!

We might multiply such cases *ad infinitum*, and perhaps *ad nauseam*. But what is the reason of this strange disposition to overlook what is patent, and to grope in search of the occult? Why ignore what is evident, to look for what is hidden? Is it because the naked truth is too simple, and that our vanity is flattered by the idea of being able to unveil the concealed mysteries of nature?

With the exception, indeed, of the variations in the quantity of the biliary secretion, the diseases of the liver are by no means easily detected. The secretion of bile is only one of the functions of this organ, and the affections which do not modify this act, are of difficult diagnosis, even to accomplished physicians. It is easier, therefore, to prefer charges against the liver than to refute them, and this affords a safe refuge for ignorance. It is not our purpose to deny the existence of hepatic affections; but to expose the fallacy of attributing other diseases to the liver. Nearly all medical writers believe hepatic affections to be more common to warm than to cold climates, and if this opinion were restricted to modifications peculiar to our fevers it would undoubtedly be correct. But, according to my observation, all the other forms of liver disease are more common in the Northern States of this Union, and in London and Paris, than they are in this latitude. The works on pathological anatomy are full of illustrations obtained in colder climes, which we scarcely ever see in this section of country. I saw more of such affections during my attendance upon the hospitals of Europe than I have seen in the whole of my professional career here.

L. A. D.
The Principles and Practice of Obstetrics. By HUGH L. HODGE, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children, in the University of Pennsylvania; Consulting Physician to the Philadelphia Dispensary; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, etc., etc. Illustrated with 150 Lithographic Figures from original Photographs, and with numerous Wood Cuts. Philadelphia: Henry C. Lea; 1866.


Obstetrics: The Science and the Art. By CHARLES D. MEIGS, M.D., Lately Professor of Midwifery and the Diseases of Women and Children in Jefferson Medical College at Philadelphia, and one of the Physicians to the Lying-In Department of the Pennsylvania Hospital; Member of the Society of Swedish Physicians at Stockholm; Member of the American Philosophical Society, etc., etc. Fifth Edition, Revised; with 130 Illustrations. Philadelphia: Henry C. Lea; 1867.

During the past and present year, the above most valuable contributions have been made to obstetric science and literature.

Professor Hodge's work on the Principles and Practice of Obstetrics we believe to be the most complete and perfect system of midwifery ever published, in the English or any other language.

Dr. David D. Davis' Obstetric Medicine is a much larger and more comprehensive book, two large quarto volumes, comprising dissertations on the diseases of women and children, as well as midwifery proper. Prof. Hodge's work is one very large quarto volume, containing five hundred and fifty double-column pages, confined strictly to the principles and practice of obstetrics, illustrated by numerous plates, splendidly executed.

Of the merits of this work we can not say too much. It is too extensive for a text-book for medical students, and indeed for many physicians, in the present impoverished state of the South; but it ought to occupy a place
in every public and college library; and we consider it indispensable to every practitioner who aspires to usefulness or distinction as an obstetrician. It will long endure as a monument to the genius, talents, and untiring industry of the truly good and able author.

We would gladly furnish a more extended notice of this comprehensive and excellent work, but it is unnecessary; the name of Hugh L. Hodge, North, East, South, and West, is a sufficient guaranty for the worth of whatever may emanate from his pen.

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The high estimation in which Dr. Bedford’s work is held by the profession, is very satisfactorily attested by the fact that, notwithstanding the numerous good treatises on midwifery published, or republished in the United States, during the last decade, this, the third edition, has been called for, which the author has carefully revised and corrected.

A strong proof of the good opinion of obstetric teachers is its adoption as a text-book by nine colleges previous to the present improved edition.

When received last October, without observing that it had been adopted by other colleges, after examining its merits, we cordially recommended it as a text-book to the class in attendance on the lectures in the Medical College of Georgia.

This work is very creditable to the author, evincing extensive reading, careful study, close observation, and great practical experience. A most valuable book, both for students and practitioners.

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In April we were very much gratified at receiving, from the publisher, a copy of the fifth edition of Professor Meigs’ erudite and excellent treatise on the Science and Art of Obstetrics.
We were delighted to find our venerable friend, and former fellow-citizen, though "old and weary with service," still warm with zeal in the cause of humanity, and full of devotion to that noble profession to which he has always been an honor, and which has ever delighted to honor him; when his great age and long labors might well entitle him to an honorable discharge from service, and to the enjoyment of sweet repose, blessed as he is, with all "that which should accompany old age."

"As honor, love, obedience, troops of friends," it is glorious to behold "the old man eloquent," with indomitable energy and untiring industry, by day and by night, laboring to perfect his benefaction, and render his last donation to humanity, an offering worthy the illustrious donor.

The original edition is already so extensively and favorably known to the profession that no recommendation is necessary; it is sufficient to say, the present edition is very much extended, improved, and perfected.

Whilst the great practical talents and unlimited experience of the author render it a most valuable acquisition to the practitioner, it is so condensed as to constitute a most eligible and excellent text-book for the student.

J. A. E.


We have carefully examined this very neatly bound volume, and advise its use to students, who will be aided by it very much in their dissections. The author's reasons for the absence of plates are worthy of consideration.

F.
A Treatise on the Principles and Practice of Medicine; designed for the use of Practitioners and Students of Medicine. By Austin Flint, M.D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, and in the Long Island College Hospital, etc., etc. Second Edition, revised and enlarged. Philadelphia: Henry C. Lea, 1867; 8vo.; pp. 970.

This work has the merit of having been written by a practical physician, possessed of more than ordinary industry and powers of observation. His previous productions had already placed him on vantage ground with the profession in this country, when the first edition of his Practice of Medicine made its appearance. This second edition will confirm his claims to a position with the foremost as an able teacher and safe practitioner.

L. A. D.


This excellent book may now be said to have become classical, for it has been firmly established as the best of its kind, and is therefore entitled to a place in every library, after having been carefully read. We can not recommend it too highly.

L. A. D.

Guide for using Medical Batteries: Being a compendium from his larger work on Medical Electricity and Nervous Diseases, showing the most approved apparatus, methods, and rules for the Medical employment of Electricity in the treatment of Nervous Diseases. By Alfred C. Garratt, M.D., Fellow of the Massachusetts Medical Society, and member of the American Medical Association. Philadelphia: Lindsay & Blakiston, 1867; 8vo., pp. 180.

The use of Electricity in the treatment of diseases is daily becoming better understood and systematized. Its beneficial effects, which long remained doubtful, are consequently now generally conceded. This "Guide" will be found essential to those who may desire to avail themselves advantageously of this interesting agent.

L. A. D.
The Science and Practice of Medicine. By William Aitken, M.D.,
Edinburgh, Professor of Pathology in the Army Medical School;
Corresponding member of the Royal Imperial Society of Physicians
of Vienna, etc., etc.; Formerly Demonstrator of Anatomy in the
University of Glasgow, etc. In 2 vols. From the fourth London
Edition, with additions by Meredith Clymer, M.D., late Professor of
the Institutes and Practice of Medicine in the University of New
York, etc., etc. Vol. II. Philadelphia: Lindsay & Blakiston, 1860;
royal 8vo., pp. 1,078.

We have had occasion to notice this work upon the
reception of the first volume. The second volume has
just been received, and it affords us pleasure to recom-
 mend it to the profession. The additions of Dr. Clymer
to this volume alone exceed 300 pages. The work alto-
gether contains such an extensive exposé of practical
medicine that it may be consulted with advantage even
by the most experienced physician. L. A. D.

An Index of Diseases and their Treatment. By Thomas Hawkes
Tanner, M.D., F.L.S., Member of the Royal College of Physicians,
etc. Philadelphia: Lindsay & Blakiston, 1867; royal 8vo., 397 pp.

This is the very counterpart of the large work of Dr.
Aitken—and yet it is not without value, if used only as a
remembrancer by one already well versed in his profes-
sion. But if adopted by students as a short road to that
minimum of knowledge required in the "green room," it
can not be otherwise than injurious. L. A. D.

Why Not? A Book for Every Woman. The Prize Essay to which
the American Medical Association awarded the gold medal for 1865.
By Horatio Robinson Storer, M.D., of Boston, Surgeon to the
Franciscan Hospital for Women; Professor of Obstetrics and the
Diseases of Women in the Berkshire Medical College, etc. Issued
for general circulation, by order of the American Medical Associ-
ation, etc. Boston: Lee & Shepard; 1867.

The subject of criminal abortions is becoming one of
intense moment, and this small volume, from the pen of
so eminent a medical man, should be accepted as a warn-
ing to all who may be tempted to commit the crime. It
comes adorned with the seal of the American Medical
Association, and the world should receive and endorse it
as a book calculated to do much good. F.
MEDICAL ASSOCIATION OF GEORGIA.

The notes furnished us of the proceedings of the recent meeting of the Medical Association of Georgia, convened at Griffin, Georgia, were imperfect, and we now renew the subject, a fuller report having been furnished since the publication of our last number.

The paper read by Dr. Wm. P. Holt, of Macon, Ga., which is published in this number, elicited an interesting discussion.

Dr. Flewellen reported a plan, extemporized by him some years ago, to accomplish forced delivery, which he thought would generally obviate the necessity for this unusual and dangerous operation of section of the cervix uteri.

It was in the case of a lady about seven months advanced, who, without any other apparent cause than that of pregnancy, was seized with obstinate and uncontrollable vomiting, which persisted for several days, in spite of all efforts to arrest it, and until it became evident that she must die without the accomplishment of speedy premature delivery.

To effect this, a toy balloon of pure india rubber was procured, a portion of its wall cut away, a flexible catheter introduced through the aperture, and the india rubber bag drawn over the end, or laid in plaits as smoothly as possible the distance of several inches along the catheter, and tied around it so securely as to prevent the passage of fluid.

The catheter thus surmounted was passed through the cervical canal, the cervix resting about midway the bag. The nozzle of a suitable syringe was then adjusted to the external open end of the catheter, and cold water gradually forced through it—thus expanding the rubber bag into the form of an hour-glass—the constriction repro-
senting the part within the canal, and the bulbous parts the expanded extremities of the india rubber sac—one being within the internal, and the other without the external os uteri.

Dilatation and speedy delivery were accomplished without bad results.

Dr. DeS. Ford, of Augusta, mentioned a case of the kind, where the hypodermic administration of a grain and a half of sulphate of morphia, introduced at intervals within three hours, succeeded in dilating the os and permitted forced delivery. The woman was a *prima para*, thirty-eight years of age, and was fast sinking, having been in labor five days. The operation of bilateral incision of the cervix uteri, he believed, was not so dangerous as is generally supposed.

Dr. Powell, of Atlanta, discussed the subject at some length: stated that the operation, under many circumstances, was certainly justifiable; but the necessity for such interference should be determined by a thorough knowledge of the symptoms, which indicate that the labor, if left alone to nature, would jeopardize the safety of the mother; alluded to many of the circumstances or obstacles justifying and even requiring the operation. Unyielding rigidity of the cervix, in a healthy condition, may require surgical interference; but generally the knife will not be required, unless the extensibility of the fibres has been destroyed by disease, or become undilatable in consequence of cicatrices. The propriety of the operation in case reported by Dr. Holt, was clearly proven. He also stated, that the principle of Dr. Flewellen's mode of producing premature labor was old; but the plan was new, practical, and ingenious.

Dr. Thomas, of Savannah, said that the plan suggested by Dr. Flewellen was of considerable importance to the profession, in connection with the production of abortion.
He then gave his views at some length on the case reported by Dr. Holt. He congratulated the Association on the prospect of a return to its legitimate work—the discussion of scientific subjects connected with the medical profession.

Dr. W. F. Westmoreland remarked that the case just reported by Dr. Holt, of Macon, Ga., was one of great interest; and as there had been, by members, some doubts expressed as to the propriety of the bilateral section of the os uteri, he felt that every member who had been called to treat cases requiring such mechanical interference, should give the Association the result of their experience.

Impressed with this duty, he now proposed to give a brief report of a case in which, in connection with Drs. L. H. Orme and J. F. Alexander, he performed the same operation.

The subject was a *prima para*, twenty-five years of age. From Dr. Orme, who had charge of the case for the first six days of the labor, he obtained the following history of the case:

On Saturday, the 25th November, 1866, labor commenced, and continued with more or less intensity until the following Wednesday, when the membranes were ruptured. There was no dilation of the os up to this time.

After the “waters” were discharged, the pains increased in intensity until they were almost unendurable. At no time, notwithstanding the most terrible pains, did the os dilate to more than the size of a Mexican dollar.

On Friday, the seventh day of the labor, he saw, with Drs. Orme and Alexander, the case for the first time. The patient, at that time, was greatly exhausted, a little delirious, with frequent and feeble pulse; the os was dilated to the size of a silver dollar, the edges thick and rigid, presenting a cartilaginous feel.
It resisted every effort at mechanical dilatation. Upon consultation, it was decided to make a bilateral section of the os uteri, and deliver with the forceps. He made the section with a pair of scissors, extending the incisions from an inch and a half to two inches on either side. It was not found practicable to deliver with the forceps, and craniotomy was then resorted to; and after considerable difficulty, delivery of a well-formed child was finally accomplished. The patient did not rally, but continued to sink; and died in ten hours after the operation.

In this case, as in that reported by Dr. Holt, the woman would have certainly died with the child in utero, but for some mechanical interference.

The choice in such cases is between a section of the os and Caesarian section.

It was unnecessary to discuss the relative dangers of the two operations to the mother. He did not regard the section of the os uteri, under such circumstances, as a formidable operation. That Dr. J. Marion Sims had demonstrated that complete section of the neck of the uterus could be made without inducing any unpleasant symptoms; that in sterility, the result of some forms of mechanical dysmenorrhea his favorite plan of treatment was the bilateral section of the neck, extending to the internal os. While he admitted that there would be more risk in making a section of the gravid than the non-gravid uterus, still, Dr. Sims' operations upon this organ has taught us that such operations are not so formidable as was once supposed.

The fear of wounding the peritoneum should not deter us, as the portion of the uterus incised corresponds to the neck in the non-gravid uterus, and has no peritoneal covering.

He suggested that four or five sections or incisions would perhaps give more space for the passage of the
child's head than the bilateral section; that in the next operation of the kind that he was called on to perform, he should adopt this plan.

Dr. Charters, our worthy President, then yielded the chair to Dr. T. S. Powell, first Vice President, for the purpose of giving his views on the subject.

Dr. J. F. Alexander reported a singular case of a citizen of Atlanta, who, upon entering his room, began combing his whiskers, and thousands of sparks were emitted and fell to the floor; and farther, that when he would grasp a common glass tumbler with his hand, it would break in pieces.

Dr. A. W. Griggs, of West Point, was then conducted to the stand, and entertained the Association in an able and eminently creditable manner upon the subject of electrical forces as connected with intermittent fever.

A Committee was appointed to prepare an Address to the Public on the true relations of charlatans and their nostrums to legitimate medicine, to report at next meeting. Committee—Drs. McDowell, Holt, and Crawford.

A Committee to revise the Constitution of the Medical Association of the State of Georgia, to report at next meeting. Committee—Drs. W. F. W. Westmoreland, Griggs, Ray, Banks, and Myers.

A Committee to present a report of the Medical Topography of the State, to report at next meeting. Committee—Drs. Griggs, Thomas, Flewellen, Alexander, and DeS. Ford.

A Committee to report upon the medicinal properties and uses of the various unofficinal indigenous plants of the State of Georgia, and other States with which they may be familiar. Committee—Drs. J. G. Westmoreland, Charters, Crawford, Geddings, and Hammond.
STANDING COMMITTEES.

Committee to prepare sketches of the life and character of those members of the Association who have died since the meeting of 1861—Drs. DeS. Ford, Banks, and Logan.

Committee to examine Prize Essays—Drs. Banks, J. G. Westmoreland, DeS. Ford, Drewry, and O'Keefe.

Committee to memorialize the Legislature on registration of births and deaths—Drs. Habersham, Westmoreland, and Word.

The Association offers One Hundred Dollars for three Essays—Fifty Dollars for the first, Thirty Dollars for the second, and Twenty Dollars for the third—or medals, amounting to the same, as the Essayist may prefer.

We sincerely trust that the members of these Committees, thus appointed, will become so much interested in the annual meetings of our Association that they will prepare full reports, which will undoubtedly prove of great instruction and value.

Lithotomy in a Female. By John Stone, M.D., of Linton, Ga.

We have received from Dr. Stone a letter in which he gives us an account of an interesting operation for the removal of a large calculus from a woman, by means of an incision of the urethra and the use of a pair of ordinary bullet forceps. We regret that lack of room prevents us from giving the details in full.—[Ed.]
Pathology of Cerebral Softening.

Two Parisian hospital internes, MM. Prevost and Cotard, have diligently availed themselves of the opportunities afforded them during their residence at the Salpetrière, of studying the pathology of cerebral softening. In addition to noticing the appearances presented in the brains of persons dying with softening of the brain, they have, by the advice of M. Vulpian, produced artificially in animals some of the symptoms attending this morbid condition. Their researches, and the conclusions derived therefrom, were last year communicated to the Société de Biologie, and have appeared in various numbers of the Gazette Médicale de Paris for the present year. Their object, the state, has been to determine the true relation of obstruction of the blood-vessels to cerebral softening. No one, they say, denies in the present day, the part which obliteration of the vessels plays in the production of softening of the brain; but are all cases of softening to be attributed to this cause? Having related and commented on a number of experiments and post mortem examinations, and given a general summary of the results, MM. Prevost and Cotard remark, that they have not studied every point in the history of cerebral softening. This was not their intention; their purpose has been to offer some new considerations, and to elucidate some still obscure points. They have taken no notice of the various kinds of inflammatory softening. The following are the principal conclusions at which they have arrived.

Experiments on animals (consisting in the injection into the vessels of lycopodium or snuff) has enabled them, by means of these artificial emboli, to produce softening identical with that which is observed in man, and to follow its progress through various stages. In this way they have been able to study the hyperemia which is first produced, and necrobiotic degeneration which follows, and, finally, the production of connective tissue and the formation of yellow patches which belong to the third period of softening. Analogous experiments have already been made by MM. Virchow, Cohn, Panum, etc.; but the procedures employed by them have produced death too rapidly to allow them to study softening in its different phases. From their experiments, MM. Prevost and Cotard have ascertained that ordinarily a distinct conges-
is produced at the points where the obstructed artery is distributed. The cause of this hyperæmia it is difficult to determine at present; but, whatever may be its mechanical cause, the hyperæmia of red softening must be considered as of an entirely different nature. As early as the third day, there are present well-defined granular bodies, and a large number of fatty granulations not yet agglomerated; these are collected around the capillaries, forming, as it were, a sheath to these vessels. In some instances, the walls of the capillaries have presented consecutive granular and fatty degeneration; and, in one case, dissecting aneurisms were formed. In a dog which survived the experiment fifteen days, a true yellow patch was found in the cerebral convolutions.

The study of cases at the Salpêtrière, in which cerebral softening has been found after death, has led the authors to consider the process very analogous to that which they have artificially induced in animals. The necrobiotic process has appeared to them almost always to depend on arrest of the cerebral circulation, varying in origin; and they have observed a certain relation between the various forms of disturbance and the characters of the softening. The disturbance of the circulation sometimes arose from obstruction of any artery by a thrombus or embolus; sometimes from atheromatous degeneration of the cerebral arteries; sometimes, perhaps, from more or less general capillary embolism. In two cases, no cause could be ascertained; but perhaps the arterial obstruction escaped notice. None of their observations have led them to infer with certainty that softening has been due to atheromatous degeneration of the capillaries; this degeneration may be consecutive.

Phenomena of irritation are sometimes added to the process which essentially constitutes softening. In some instances, inflammation and suppuration took place around the infarctus formed in dogs; and the authors endeavor to trace a relation between these phenomena and the production of false membranes on the dura mater at the level of old foci of softening.

In speaking of the symptoms, they point out that the attacks of vertigo and the apoplectiform paroxysms followed by rapid death without lesion of the nervous centres, which most authors have ascribed to congestion, are due to impeded cerebral circulation. They endeavor to establish a direct relation between the intensity of the
attack and the extent of the interference with the supply of blood; and they show that both thrombosis and embolism may give rise to sudden death. Regarding paralysis, spasm, and other symptoms of softening, they have but little to add to what has already been said by other authors. The paralysis, they find, most frequently sets in suddenly, and rarely follows a progressive course; hence no diagnostic value can be attached to this symptom. Examination of the temperature of the rectum in some instances, and the information on this point which the authors have derived from M. Charcot, leads them to conclude that the temperature of the body is not essentially raised during cerebral softening; and hence that, if inflammation have any share in the process, it must be altogether secondary. It would, they observe, be interesting to make a similar series of observations in cases of inflammatory softening.—Am. Jour. Med. Sciences, April, 1867, from Gaz. Méd. de Paris, July 14, 1866.

Apoplexy of the Medulla.

M. Levier, after describing a case of apoplexy in the lumbar region, comments on the cases of medullary apoplexy hitherto reported. In the medulla oblongata, there have been nine cases, four only being pure; the results were, loss of consciousness, involuntary epileptic movements, and sudden death. Of apoplexy in the spinal cord there were seventeen cases; in two thirds of these, the lesion was in the upper part of the medulla. The attack was rarely sudden; it was generally preceded for a week or a fortnight by pain in the spinal cord and symptoms of congestion. The first symptom is paralysis, which often occurs during sleep, and affects the sphincters; its progress is rapid, and it is not accompanied by contractions of the limbs; its extent depends on the seat of the apoplexy. Reflex excitability is destroyed. There are ordinarily greatly impeded respiration, feeble cough, difficulty in expectoration, aphonia, and impairment of speech. Paralysis of sensation generally follows that of motion; sometimes there is hyperesthesia; the spine is not tender on pressure. Both sides, or one only, may be paralyzed; in three instances of the latter which occurred, there was paralysis of sensation on the opposite side. There is elevation of temperature in the paralyzed parts.
The duration of the disease varies from a few hours to some months. The diagnosis may be difficult. In meningeal apoplexy, there are convulsions; the paralysis of motion is less complete; moreover, it is generally secondary, occurring in the course of tetanic or convulsive affections. Congestion of the medulla is distinguished by the short duration of the paralysis, the slightness of the symptoms, and the rapid return of health.—Ibid.

**Treatment of Diseases of the Heart.**

Dr. S. O. Habershon, in an interesting paper in the late volume of *Guy's Hospital Reports*, lays down seven principles of treatment in all cases of heart disease.

The first is, as far as possible, to *lessen its work*; and this may, to some extent, be effected by mechanical rest, by a recumbent position, and by the avoidance of sudden changes of temperature.

The second is to *insure regularity of action*, by avoiding mental excitement, by guarding against indigestion, and by never allowing constipation to continue.

The third is to *lessen distension*, especially of the right side of the heart, by purgatives, diuretics, and by mechanically diminishing the quantity of fluid in circulation.

The fourth is the prevention of syncope. With this view, sudden muscular movements must be avoided; stimulants may be required, as ammonia, brandy, etc.; and sedatives must be withheld or cautiously administered.

The fifth is to strengthen the muscular fibres of the heart, by suitable nourishment, a bracing air, if other conditions allow; chalybeate medicines, and if the patient be exhausted by want of sleep, this symptom must, if possible, be relieved.

The sixth is to prevent fibrillation of the blood. For this purpose carbonate of ammonia will often be useful; other alkalies, as potash, soda, and their salts may be beneficial, but, if long-continued in considerable doses, Dr. H. says, they depress the action of the heart. The acetate and iodide of potash may be advantageously combined with the carbonate of ammonia, or perhaps the hydrochlorate of ammonia.
The seventh is to prevent secondary complications, and to relieve them when produced. These complications are—1st, broncho-pneumonia and pleuritic effusion; 2d, pulmonary apoplexy and other hemorrhages; 3d, visceral engorgement, as hepatic and renal congestions, with ascites and anasarca. By freely acting on the bowels, the portal congestion is greatly diminished, and the liver is enabled to act in a normal manner. Thus a free mercurial purge is of great value. The kidneys may be excited to a more vigorous action by a combination of mercurial medicine with squill and with digitalis, when the latter can be borne. Salivation should be avoided. Diuretics are useful. An effectual way of diminishing the anasarca is by puncturing the skin on the thighs. The pulmonary engorgement is sometimes greatly reduced by applying cupping-glasses between the shoulders, or by the application of a blister to the chest.—Ibid.

**Etiology of Eczema.**

Dr. Frank Smith, of Sheffield, has recently made some very important observations in reference to the etiology of eczema in its relation to some disorder of the renal function, as shown by the presence of indican in the urine. In nine out of ten cases Dr. Smith has detected indican in pathological quantities. Indican is supposed to be due to a retardation of the process of declension from the complex to the more simple of the products of function and secretion. Its own highly complex formula is a strong evidence in favor of this opinion, in addition to the ease with which it is broken up into leucine, indigo, and glucine. Dr. Smith suggests that this retardation is due to accumulation of urea and other products of waste in the blood, owing to deficient renal secretion; for he has detected urea in considerable amount in the serum of eczematous patients. Indican occurs in the urine in the reaction stage of cholera and in Bright's disease. The spectrum of the solution prepared from the urine for the detection of indican is the same as that of common indigo. These observations are exceedingly important and suggestive.—Am. Jour. Med. Sciences, April, 1867, from Lancet, Feb. 2, 1867.
Importance of Preservation of the Periosteum in many Operations.

Dr. William Stokes, Jr., Surgeon to the Meath Hospital, Dublin, in his introductory lecture, remarked:

"M. Ollier, of Lyons, as I mentioned previously, has directed especial attention to the importance of periosteal preservation and transplantation in many operations. In three cases he has removed large portions of the diaphyses of the long bones with favorable results. In his other cases an epiphysis of the bone had to be removed. One of these I had an opportunity of seeing, in which the upper half of the humerus was removed, with complete restoration of bone. From his experiments, therefore, and clinical experiences, as well as from those of some others who are deeply interested in this subject, and from the cases of Dr. Moon and Professor Langenbeck, the following propositions may be stated:

1. That in sub-periosteal resections the reproduction of bone is more complete and effected with greater rapidity than after total removal of both bone and periosteum.
2. That the osseous reproductive properties of the membrane vary according as it is taken from the long or the short bones, being greater in the former than in the latter (Ollier).
3. That the normal form of the joint is better preserved when this precaution of leaving the periosteal covering is taken.
4. That the sub-periosteal resections involve less danger than when conducted on the old principle. This proposition is grounded on the result of experiments on the lower animals, the number of unfavorable results which followed when the membrane was removed being much greater than when it was left.
5. That the difficulties attending the separation of the membrane in the dead subject are not to deter us from attempting the operation on the living, inasmuch as the membrane is less adherent in the latter, and also in the diseased than on the healthy bone.
6. That resections performed in this manner are more conservative, inasmuch as re-formation of the part removed is effected, and, being attended with less risk to life than the ordinary resections, a greater quantity of bone can be removed, and in this way in a number of
cases the necessity for amputation is diminished. The
cases I have alluded to—of Dr. Moon in America, and
Professor Langenbeek—are illustrative of the truth of
this.

7. That the chances of much shortening of the limb
are diminished by this method, as shown by the results
of the ankle-joint resections during the late Schleswig-
Holstein war.

8. That in addition to these the modified Rhino and
Urano-plastic operations demonstrate that the happiest
results have been obtained by this application of experi-
mental physiology to practical operative surgery.”—Am.
Jour. Med. Sciences, April, 1867, from Med. Press and Cir-
cular, Dec. 12, 1866.

Diabetic Gangrene.

M. Verneuil lately brought under the notice of the
Surgical Society of Paris the subject of gangrene oc-
curring in diabetic patients, of which he had met with
six instances in the course of three months. In the first
case, he was called to perform amputation in a person
affected with gangrene of the foot and lower part of the
leg. On inquiry, he found the patient diabetic. The
man, a seller of wine, had been of somewhat intemperate
habits. The gangrene was said to have originated in the
pressure of the shoe on the little toe, and to have been
soon followed by the appearance of other gangrenous
spots on the foot and leg. The man ultimately died; M:
Verneuil having abstained judiciously from any surgical
interference.

In the second case, that of a man aged fifty, the patient
had for some time had bunions, one of which became
ulcerated. As the sore observed no tendency to heal, M.
Verneuil examined the urine, and found sugar. The
patient ultimately died, worn out with profuse diarrhoea,
marasmus, and low delirium.

In the third case, a patient in the Laribosiere Hospital
had an ulcer of the heel, of the size of a finger, with
sharply-defined edges, and oedema of the leg. The heart
and liver appeared healthy; but the urine contained both
sugar and albumen. This patient also died: but nothing
in the kidneys could be found that was capable of ac-
counting for the albumen.
The fourth case was that of an ecclesiastic of high rank, about sixty-six years old. He had diabetes, with gangrene of the little toe, several eschars on the great toe, and dorsum of the foot, and an extensive carbuncular phlegmon on the sole.

In the fifth case, that of a lady, there was a carbuncle on the back. Incisions made into this producing no improvement, M. Verneuil examined the urine and found it diabetic.

In the sixth case, that of a man aged fifty-five, paralytic and subject to intermittent fever, there was a gangrenous eschar in the groin, with offensive discharge. This patient, alone of the six, so far improved under an alkaline treatment as to recover; in the other five, death occurred in a few days or weeks after the appearance of the local disease. Such cases as those related, M. Verneuil observes, point to the advisability of examining the urine before operating in cases of gangrene of the lower limbs.—Am. Jour. Medical Sciences, April, 1867, from L'Union Médical, Dec. 1, 1866.

On "Glyconine"—a new Glycerole.

To obtain this compound, M. Edmond Sichel employs four parts (by weight) of yolk of egg, and five parts of glycerin, which he mixes simply in a mortar. It has the consistence of liquid honey, and is unctuous like the fatty substances, over which it has the advantage of being easily removed by water. It is unalterable, a specimen having been left exposed to the air for three years with impunity. Applied to the skin, it forms on the surface a varnish, which protects it from the contact of the air. These properties render it serviceable for broken surfaces of all kinds, particularly for burns, erysipelas, and cutaneous affections, in which it soothes the itching, and also for sore nipples; its harmlessness prevents, in the latter case, any interruption of suckling.—Boston Medical and Surgical Journal, March 21, 1867, from the Bulletin de Thérapeutique.
Syphilis Extensively Propagated by Vaccination, in France.

In the western department of France (Morbihan) some villages have been the theatre of severe syphilitic symptoms upon more than thirty children, who had all been vaccinated from a little girl with six punctures on each arm, the child herself having been operated upon from another who had been vaccinated from lymph preserved between two plates of glass obtained from the authorities. This misfortune created so much sensation that the Academy of Medicine of Paris sent down the Commissioners, Messrs. Henry Roger and Depaul. These gentlemen have just presented their report to the Academy, and this important document ends with the following considerations: 1. Several of the children we examined were undoubtedly suffering from secondary syphilis. 2. We see no way of explaining this contamination but by vaccination; and we are confident that the cases we have seen were really syphilis engendered by vaccination. 3. As to the origin of the virus, it is very probable that the poison is traceable to the lymph, preserved between two pieces of glass, supplied by the authorities. As primary symptoms were also observed among the children, Mr. Ricord begged the commissioners to insert that fact in their report, which these gentlemen agreed to do. Here we unfortunately have again repeated the sad occurrences which took place at Rivalta, Italy, a short time ago.—Lancet.

Cholera and Contagion.

In noticing a pamphlet of Dr. E. Hearne, of Southampton, on the non-contagious nature of cholera, the editor of the Brit. Med. Jour. quotes the following:

"M. Grimand relates that during the late epidemic at Marseilles, there were employed at the post-office twenty-two persons in the bureau for dispatching, and nine in the bureau for receiving letters. Amongst the former there was no sickness at all, whilst amongst the latter there were eight persons sick, and one death. He whose business it was to open letters from the east was attacked with cholera; four others engaged in the same business were attacked one after the other."—Med. and Surgical Reporter, Dec. 29, 1866.
Ingrowing Toe-Nail.

At a meeting of the Norfolk (Mass.) District Medical Society, the President, Dr. Cotting, as per report in the Boston Medical Journal, alluded to his method of operation for the relief of ingrowing toe-nail. He had never found it necessary to remove the nail, and in one of the cases recently operated on, the nail had been removed some years before without any good effect. His method is to remove a portion of the sound, as well as diseased flesh, from the side of the toe, say three quarters of an inch long, half an inch wide, and as thick as the member will admit of. Two cases, so operated on since the last meeting, succeeded perfectly. Dr. Stedman stated that he had recently performed the operation with complete success.—Med. and Surg. Reporter, Jan. 12, 1867.

Croup Treated by Sulphur.

The Brit. Med. Jour., quoting from the Gaz. Méd. de Paris, states that M. Laganterie, from observing the effect of sulphur on the oidium of vines, has been led to administer it in several cases of croup. He mixes a teaspoonful in a glass of water, and gives the mixture in teaspoonful doses every hour; the effect he describes as wonderful. The disease is, in effect, cured in two days, the only symptom remaining being a cough, arising from the presence of loose pieces of false membrane in the trachea. Mr. L. says that he has followed this plan in seven cases, all being severe, especially the last, in which the child was cyanotic, with protruded rolling eyes, and noisy respiration.—Med. and Surg. Reporter, Feb. 23, 1867.

Potent Disinfectant.

The Dublin Medical Press states that Dr. DeWar, Kirkaldy, has discovered that "for the disinfection of inanimate material, the addition of a little nitre to sulphur, and the combination of these fumes with the steam of boiling water, improvises a disinfectant at once the most powerful, most searching, and most efficacious that can be obtained, utterly destructive at once of any latent contagion, and of every form of insect life."—Med. and Surg. Reporter, March 9, 1867.
"Patent Deodor Vessel."

We have received, from the Trenton Pottery Company, a specimen of a new chamber-vessel, with a hollow lid, intended to hold a liquid disinfectant, which is exposed when the vessel is used, for the purpose of neutralizing the foul emanations. The idea is an excellent one, and will be found to be very useful in practice. A recipe for an excellent disinfectant accompanies the vessel. We understand that the Company will immediately put these vessels on the market.—*Med. and Surg. Reporter*, Jan. 12, 1867.

Napoleon having been informed that every profession but that of medicine was represented in the French senate, determined that this anomaly should no longer exist, and accordingly promoted his physician, Dr. Conneau, to a seat in the Luxembourg.—*Med. and Surg. Reporter*, Jan. 12, 1867.

**Faculty of the Medical College of Georgia, at Augusta.**

I. P. GARVIN, M.D.,
Emeritus Professor of Materia Medica, etc.

L. D. FORD, M.D.,
Professor of the Theory and Practice of Medicine.

JOSEPH A. EVE, M.D.,
Professor of Obstetrics and the Diseases of Women and Infants.

L. A. DUGAS, M.D.,
Professor of the Principles and Practice of Surgery.

H. F. CAMPBELL, M.D.,
Professor of Operative Surgery and Surgical Anatomy.

G. W. RAiNS, M.D.,
Professor of Chemistry and Pharmacy.

EDWARD GEDDINGS, M.D.,
Professor of Physiology and Pathological Anatomy.

DeSAUSSURE FORD, M.D.,
Professor of Anatomy, general and descriptive.

WM. II. DOUGHTY, M.D.,
Professor of Materia Medica, Therapeutics, and Medical Jurisprudence.

JOHN S. COLEMAN, M.D.,
Demonstrator of Anatomy.

**L. A. DUGAS,** Dean.