ORIGINAL AND ECLECTIC.

ARTICLE XIX.

ARMY DISEASES.

We are happy to be enabled to give publicity to the following correspondence. It explains itself. The plain and practical suggestions of Prof. Dugas, the result of matured experience, are well deserving the attention of practitioners whether in or out of the army:

Augusta, Sept. 15, 1861.

Dear Sir:

As I am about to join the army, and as I apprehend sickness more than the balls of the enemy, you will do me a great favor by giving me such simple directions as I may carry out in camp, if necessary—especially for the treatment of Typhoid fever, Diarrhea, Dysentery and Pneumonia, which I am informed are the most common diseases of our soldiers.

I am sure you will pardon this call upon your kindness from

Your friend and late pupil,

My Dear Sir:

I cheerfully comply with your request to furnish you a few general directions for the management of the diseases you will be most likely to encounter in your campaign. You are
correct in believing that the risk of being shot is the least of the dangers to which new soldiers are exposed. The radical change to which they are subjected in all their habits of life is well calculated to induce disease, independently of the exposure to contagious and epidemic affections.

Typhoid Fever is the bane of military camps and hospitals, and nothing should be neglected that may tend to keep these places clean and well ventilated. As far as practicable, those suffering with this malady should be kept apart from those affected with other diseases, for typhoid fever is unquestionably sometimes contagious as well as epidemic. But you wish some simple rules for its treatment. I will then say at once that, in the present state of our knowledge, typhoid fever is a self-limited disease; that it cannot be arrested in its progress, and that it usually requires from three to six weeks to run its course. You need not, therefore, trouble yourself, nor your patients, with attempts to shorten the period of its duration. Mild cases will naturally occupy less time than severe ones. What most behooves us is to enable the patient to live through it as comfortably as circumstances will permit. This is to be done by avoiding all deteriorating medication, by subduing all debilitating symptoms, by allowing such food as may be readily digested, and by the administration of nervines and stimulating tonics.

1st. Avoid deteriorating medication—that is to say, do not bleed, give no purgatives, do not mercurialize, and eschew all nauseants. They all lessen the energies of the system, already unduly depressed by the disease. If the bowels are disagreeably distended, an enema of tepid water will relieve them. The more quiet you keep the bowels, the better, for they are apt to be too much relaxed. Do not yield to the vulgar error of supposing it necessary that the patient should have a daily discharge from the bowels. As a general rule, the less often they are moved, the better, for this is an evidence that they are not seriously implicated.

2d. Subdue debilitating symptoms. The most common of these is diarrhoea. Control it if possible at its inception—
and as often as it may evince a tendency to return. The mixture recommended below, under the head of diarrhoea, is one I have long been in the habit of using for that disease, whether idiopathic or dependent upon typhoid fever.

The occurrence of hemorrhage from the bowels or from some other portion of the mucous surface is always an alarming manifestation. If from the bowels, I use the diluted sulphuric acid or the elixir of vitriol in doses of 20 drops to the tumbler of water three or four times in 24 hours, (sweetened if desired by the patient.) This is usually found to be an agreeable beverage and is often very beneficial. If it fails, you may give 20 grains of alum, dissolved in a quart of water, through the day, in such draughts as the patient will take without much reluctance. This may also be sweetened if desired. Large enemas of cold water, retained as long as possible, will, in bad cases, very materially aid in checking the hemorrhage. These may be repeated as often as the urgency may require.

If the hemorrhage is from the nostrils or the gums, and will not yield to cold ablutions, you should use styptic lotions, such as a solution of alum, of sulphate of zinc, (5j. to a pint of water,) the muriated or nitrated tincture of iron, (5j. to a pint of water) or the per-sulphate of iron.

3d. Feed the patient. I think it a matter of great importance to see that sufficient nourishment be taken. The desire of the patient for certain articles of food should be gratified, especially when very decided, for it is rare that what he craves will injure him, if allowed in reasonable quantities. Very few will eat too much. The appetite should be encouraged by such delicacies as you may be able to procure.

4th. Administer nervines and stimulating tonics. The nervous system is more or less affected in all cases of typhoid fever, and all practitioners concur in advocating the use of agents specially directed to it. Subsultus tendinum, sleeplessness, muttering delirium, stupor—all indicate the morbid condition of the nervous centres. Opium and camphor are very beneficial under such circumstances. A pill containing
one grain of opium and three grains of camphor may be given at such intervals as the case may require, and will usually induce sleep and lessen the action of the muscles. One pill night and morning will suffice in most cases. The infusion of valerian is often a valuable adjuvant. It is under these circumstances that a moderate use of alcoholic beverages will be found of great advantage. I need scarcely say that they are indispensable throughout the whole course of the disease, with those who have habitually used them before. During convalescence, it will be found advantageous to combine them with gentian, peruvian bark or other vegetable bitters.

With this brief outline of treatment for typhoid fever, I will pass to another subject, for I am sure you do not expect me to be more minute.

**DIARRHEA.**

For this very troublesome affection, you will, I think, find nothing better than the following prescription:

R. — Tincture of Catechu — 2 parts.
   Tincture of Opium,
   Tincture of Camphor,
   Tincture of Capsicum,
   Tincture of Myrrh — of each, 1 part.

Mix — Dose: 1 teaspoonful in a wineglassful of cold water, two or three times a day, according to circumstances.

This prescription may seem unnecessarily complex, but each of its constituents plays an important part in the effect. Its efficacy was strikingly exemplified in the Crimean army, where it was introduced by one of my pupils, who served as surgeon in the Russian service during the whole campaign. I am informed that it took precedence there of all other prescriptions in camp diarrhoea and incipient cholera. You should always keep a bottle of it on hand, and commence its use as soon as the bowels are well emptied by the disease.
DYSENTERY.

This affection is sometimes attended with a great deal of fever; in other instances with comparatively little. In all cases you will find it advantageous to administer a brisk cathartic dose of Epsom or Glauber Salts, or of Cream of Tartar at the onset of the attack. You thus disgorge the intestinal capillaries and drive out the fecal matters, and thereby relieve the tenesmus. After this you should keep up the serous stools by smaller doses (a teaspoonful) of the saline two or three times a day, as long as there is any tendency to a return of tenesmus; twenty to thirty drops of Laudanum will then close the treatment in most cases. But when there is much fever, the use of Quinine for a few days will very materially aid in the treatment. Give each morning fifteen grains, in doses of 5 grains at intervals of two hours. This must not interfere with the use of the salines. I should have stated when speaking of the salines, that after the first cathartic, a teaspoonful of table salt will often do as well, if not better, than either of the other salts. In very bad or neglected cases I have derived great advantage from large enemas of cold, or even iced water, repeated whenever returned until the tenesmus or hemorrhage be relieved. I entirely repudiate the routine practice of Calomel and Dover's Powders so much lauded by old writers.

PNEUMONIA.

The Pneumonia, such as it has exhibited itself in the southern and south-western States for the last ten years, is very different from the disease treated of under this head in the works of European or of northern writers. The difference is to be found in the type of the affection, for, notwithstanding the elaborate and able argument of Laroche, we have here to deal with a form of pulmonary disease which will not tolerate depletion of any kind, nor the antimonial medication, so valuable in the pneumonia of former times in this section of country. I cannot now discuss the question but will proceed at
once to give you an outline of the treatment most successful, I may say usually successful, with us.

We must recognise here, as well as in our epidemic dysenteries, two elements of disease—a remittent fever and a local (pulmonary) complication, either congestive or inflammatory. By subduing the former, the latter will usually yield readily. Give fifteen grains of Quinine then every morning beginning at day break, without regard to the fever, (5 grs. every two hours, three times) and do this until the febrile paroxysms are controlled. At night one-quarter of a grain of morphia, or ten grs. Dovers Powders, will, if necessary, procure good rest. Warm teas should be taken freely, if they can be had; if not, cold water should be allowed as often as desired. The patient will crave but little nourishment and should not be denied it.

If there be any pain in the side, showing a pleuritic complication, meet it at once by blistering the painful region. A blister from four to six inches square will be large enough.

This may appear to be a very simple plan of treatment, but you may depend upon it as infinitely more successful than any other. If you bleed, purge, or antimonialise your patient, he will often die when you least expect it. Active antiphlogistics were formerly very successful here, as they may still be in the northern States, but the type of the disease has undergone such a radical change with us, that we can no longer resort to them with impunity.

MEASLES.

Although you do not name measles among the diseases upon which you desire my views, I will add a few words on the subject because our army has suffered very much from this distemper.

In the first place you should bear in mind that this is a disease of self-limited duration, and that we cannot arrest its course. Since we cannot cure it, therefore, our business is to see that its progress be not aggravated by complications. In the natural course of the disease the effect of the poison by
which it is induced manifests itself upon the skin and the adjacent mucous surfaces of the throat and air passages, and so long as it goes no farther, there is but little danger. Let us, then, by careful avoidance of exposure to cold, prevent a recession of the cutaneous affection and its invasion of the internal organs. By so doing the disease will usually run its course in ten days. The cough which is often quite troublesome should be allayed by an occasional dose of Paregoric or Laudanum. The patient should commit no excess in diet, but may eat moderately of plain food if he desires it. Purging should be avoided, for the susceptibility of the intestines is very great and diarrhea is one of the principal dangers we have to apprehend. Its manifestation should be immediately checked by the astringent mixture already alluded to.

You must especially remember that the subsidence of the cutaneous affection does not constitute the cessation of danger, for there seems to be in Measles an affection of the blood, or of the general stamina which requires several weeks to be overcome after the commencement of convalescence. Hence it is that many persons under the impression that the disease has passed off, commit imprudences of diet or exposure, and relapse. Some will thus take diarrhea, some dysentery, and others pneumonia, which occurring in an already impaired constitution, will rapidly carry them to the grave. The great majority of deaths from Measles will be found to take place in this way. No soldier should, therefore, be allowed to resume his duties in less than a month after the disappearance of the eruption, and during this time it would be well for him to take tonics, of which the best will probably be found to be ten drops of muriated tincture of iron, largely diluted, (in half tumbler of water,) two or three times a day. Those who have been accustomed to alcoholic liquors should be allowed them in suitable quantities. Warm clothing and moderate exercise in the open air in good weather, will contribute to the restoration of vigour.

I have now, my dear friend, complied with your request in as brief a manner as I could, and fear that in endeavoring
Spasmodic Croup. [November,

to avoid prolixity, I may have erred in the other extreme and left unsaid much that might be important. I trust, however, that I have said enough to present at a glance the leading principles of my practice, and this is, I presume, all you desired. Wishing you success as a physician and as a soldier in the iniquitous war waged against us, I remain

Yours very truly,

L. A. DUGAS.


On the 16th day of June, at midnight, I was called to see a child of Lieut. H. I found my little patient laboring under great difficulty of respiration, the paroxysms of coughing were frequent and spasmodic—the heart's action was, as usual, considerably accelerated, during the fits of coughing—the inspiration was almost suspended—the countenance was flushed, occasionally it was livid. During the intervals between the paroxysms of coughing, the child lay as if dead. I immediately ordered a hot bath, with mustard, to be prepared; after it had remained in the bath some 10 or 15 minutes, it began to revive. As soon as it was taken from the bath, I commenced giving a teaspoonful of a mixture composed of one-half hive syrup and one-quarter each of syrup of squills and syrup of ipecac, every fifteen minutes until vomiting could be produced. It was over one hour before I could procure vomiting, and not then as freely as I desired, until some five or six doses of the combination had been given. What was first vomited looked like frothy mucus; towards the last, upon examining the sputa, I could distinctly discover shreds of lymph. Fearing to push the emetic any further, I ordered one grain of calomel to be given every hour until it had freely operated some five or six times. I left the child relieved of the distress in which I found it; but with little hopes of finding it alive when I should again visit it. Upon paying my
second visit, the mother informed me that the oppressed breathing had continued during my absence, and was at times accompanied as it was when I first saw the child, with a loud hissing noise. I found the calomel had operated freely, and all the severe croupy symptoms had abated. Ordered calomel to be discontinued; if necessary, to repeat the mustard bath, and every two hours to give a teaspoonful of a cough mixture composed of equal parts of syrup of squills and syrup of ipecac, until every croupy symptom disappeared. From this time my little patient continued to improve, and is now a remarkably fine-looking and healthy child.

There have been but few cases recorded of croup attacking children within the first six months. Andral, out of over 300 cases, mentions only one as occurring during the first month. Out of 30 cases mentioned by M. Trousseau, no case is reported under 11 months. Cheyne, in his work upon “the Pathology of the Larynx and Bronchia,” mentions meeting croup in a child three months old. Marley, in his work on diseases of children, mentions seeing croup in one child at the breast, but does not give the age. Bouchet, on diseases of infants, relates a case of croup in a child eight days old.

A Lecture on Apoplectiform Cerebral Congestion in its Relation to Epilepsy. By M. Trousseau.

Gentlemen:—You are aware that there exists in our science an opinion that apoplectiform cerebral congestion is a common disease. This is a fact so well established, so well received, that one could not well appear to doubt it.

During two years which I spent as Resident in the Insane Asylum at Charenton, I saw, or rather I thought that I saw, a tolerably large number of apoplectiform congestions. Since this period, I thought that besides these, I had seen a certain number of them either in the hospitals or in my private practice; but for fifteen years I no longer meet with any. Nevertheless, my colleagues see as many of them as formerly; the result of this, then, must be, either that I am
mistaken or that they are. It is very evident that I can entertain no other idea than that the error is on their side—otherwise I would change my opinion.

Let us see, then. A man, either with or without premonitory symptoms, is suddenly seized with apoplexy; he is picked up in a state of stupefaction, and for a quarter of an hour, an hour, and possibly longer, he continues heavy-headed, confused in intellect, and with uncertain steps. On the morrow all is past.

They say that this patient has had an apoplectiform cerebral congestion. I have said so like the others, but for fifteen years I say so no more.

Another, while walking, suddenly becomes dizzy; he ceases to see, to speak; he mutters some unintelligible words; he staggers, sometimes he falls, but rises immediately afterwards. This has lasted a few seconds; nothing remains but a little heaviness of the head, sometimes a momentary cloudiness of intellect, and three or four minutes suffice to restore everything to a natural condition.

They say that this patient has had a slight cerebral congestion. I, too, have said so, but for fifteen years I say so no more.

Why, then, gentlemen, have I changed my mind? It is certainly not through love of the paradoxical. It is that facts have forced a new light to dawn upon my mind.

In the year 1845, one of my friends was found in his bed in a state of unconsciousness. His face was swollen and of a violet hue; intellect, motion and feeling were gone; there was stertorous breathing. This was a vigorous man, forty-two years old. How long had he been in this state? His wife could not say; she had been awakened by a strange snoring, and she had sent in search of me. At this period I had already given up bleeding in apoplexy. I had the patient placed in bed in a half-sitting posture; I slapped his face with a handkerchief wet with cold water; I applied two ligatures above the thighs in order to retain momentarily a large quantity of venous blood in the vessels of the lower extremities; then I waited. An hour had hardly passed when motion was restored, feeling was being re-established and the patient replied pretty clearly to the questions that were put to him. On the morrow, excepting a painful stiffness of the loins, no trace of the storm remained.

Some time after this, I was called in great haste to see one of my neighbors, aged seventy years, who, while on the boulevard, had been seized with an apoplectic fit. He had
remained unconscious for a full quarter of an hour. I arrived just at the moment that his senses were returning. He did not as yet recognize me, gazed about him in a stupefied manner, and tossed his arms and legs about without knowing what he was doing. His lips and nose were puffed out, and his eyes were injected. Gradually everything was restored to its natural condition without my having had recourse to any active medical treatment.

The whole affair lasted some hours.

The servant man then told me that his master had had several attacks of this kind within the space of two or three years, and that they had passed off in the same manner—once after he had been bled, the other times after using a mustard foot-bath.

The same year I was consulted in my office by a lawyer from one of the provinces, aged thirty-five years, who within six months had three attacks of apoplexy. He had been bled each time, and he thought he had derived much benefit from this; they had purged him, and each month he was leech'd in the region of the anus. The last attack had taken place as he was going up the steps of his house after pleading an important case. His head had struck upon the steps, and the patient still bore traces of a pretty deep wound in the forehead. His intellect, sensibility and power of motion were in a perfectly good condition when I saw the patient, and the apoplectiform attacks had lasted, at most, one hour.

I am but a small believer in apoplexy among people of thirty-five years of age, especially when those apoplectic attacks recur every two months, and immediately the idea of epilepsy presented itself to my mind, and I therefore disclosed my fears to that one of my colleagues who had seen the patient to me. The reply was that nothing justified my suspicions, and that no convulsions had ever been seen. I still maintained my diagnosis, and a short time afterwards, in the midst of an audience, the poor lawyer was seized with an attack of falling-sickness which unhappily left no doubt in the mind of any one, and he was obliged to give up his profession. In the meanwhile, my attention had been awakened, I asked myself whether so many people that I had seen with apoplectiform cerebral congestions were not epileptics, and I was watchful.

My first patient soon had other attacks, and now he has sometimes as many as four and five attacks of epilepsy in a day, and very often vertigo of little consequence, his sight is lost and his intellect is sadly altered.
As for the old man, of whom I have also given a summary account, he still lives, and almost every year he has one or two of these attacks. Since his fall upon the boulevard, he never goes out without a servant, and this man has told me that at the moment when his master is lying on the ground, his face undergoes contortions, and he has twitchings in one of his arms, which hardly last a minute, but which amply suffice to characterize epilepsy.

Since this period, every time that I have been consulted concerning a person suffering from apoplectiform cerebral congestion, I have sought out, with the greatest care, whether from time to time, during the day, there had been observed sudden and rapid vertigos with the characteristics that I have indicated above; whether these attacks of congestion were not rather nocturnal than diurnal; whether at the commencement of the attack there had not been nervous movements, and almost always, when the attack came on in the presence of witnesses, the convulsions could be recognized.

When the congestion had taken place at night, during sleep, I learned that the urine sometimes passed involuntarily, and that for several days the tongue was sore. The face, forehead and neck were covered with small ecchymotic spots, like flea-bites. I learned, moreover, that the attacks recurred at rather shortened intervals, leaving no lasting trace behind. In one word, epilepsy was evident enough when it was sought for, when one wished to find it.

There is not a month that passes that I do not see in my office some patients said to be suffering from apoplexy, who are epileptics. There is perhaps, not a week that I am not consulted by adults, old men, and children, suffering with epileptic vertigos, and who have been referred to me as having slight cerebral congestions. And although epilepsy, in all its forms, is better known at the present day than it was twenty-five or thirty years ago, nevertheless many physicians refuse to believe in so terrible a disease, and if they recognise it they do not wish to tell the family what they think about it, and prefer to leave this sad mission to us.

Very often epileptic vertigo reveals itself in attacks which are always attributed to cerebral congestion, and to which those physicians who are occupied with the treatment of the insane have, long since, called the attention of their colleagues.

After the vertiginous attack, it is quite common to see the patients delirious for some minutes; the delirium may even continue for a considerably long period.
The judiciary annals, the archives of the prefecture of police are filled with suicides and murders which are too often attributed by physicians to what they call cerebral congestions, while they ought to be attributed to epilepsy.

One may say, almost without fear of being mistaken, that if a man who has had no premonitory trouble of intellect, who has heretofore given no sign of madness, who has not been poisoned by alcohol, or by any other substance which exercises an energetic action upon the nervous system, commits suicide or kills any one, one may say that such a man is an epileptic, and that he has had a severe attack, or rather what is more common, a simple epileptic vertigo.

These strange acts are, I repeat, attributed by most physicians to passing cerebral congestions, for this reason, that the fully developed attack is often unnoticed, and the simple vertigo is almost always so.

There is a reason which most often causes epilepsy to be unknown; this is the repugnance which families have to revealing this sad disease to physicians. Even when a mother has been a witness to a fully developed attack, she refuses to believe it to be epilepsy, and if the physician questions her, she speaks of the coma, of the loss of consciousness, but will most often refrain from mentioning the convulsions. She will call for aid against the accidents which follow the attack, but she is careful to avoid suspicion of the sad truth. I have often been consulted by persons who knew full well that they were suffering from epilepsy, but who spoke to me only of congestion; wives kept back the true state of the husbands, husbands the state of their wives, and most often, parents the symptoms experienced by their children. The physician then is always deceived concerning epilepsy; he is deceived by the patient himself who knows nothing of his attack, excepting that he has lost consciousness, and that he remained several hours in a state of half stupefaction. He is deceived by the parents who are loth to acknowledge, even to themselves, that they have an epileptic in their family. He is deceived by the recollections of his early medical education during which he has been repeatedly told that apoplectiform cerebral congestion is a common disease. Let us not, then, be astonished if congestion is still so generally accepted.

There is, I concede, a convulsive form which assimilates a cerebral congestion. It happens, sometimes, although very rarely, that at the commencement of an epileptic attack, the tonic period, that is to say the one during which the muscles of the chest preserve an absolute rigidity; it happens some-
times, I say, that this tonic period lasts two or three minutes, instead of lasting only fifteen or thirty seconds, and the individuals die asphyxiated, as persons die in a tetanic paroxysm, as animals die who have been poisoned by substances containing strychnia, as our colleague, M. Segalas, has so well demonstrated nearly forty years ago.

As, in this case, there have been no chronic convulsions, such as are best known to persons outside of the profession, and as during the whole continuance of the tonic convulsion, the face has been swollen, the vessels of the neck have been distended and knotty, as in fact there has been an enormous congestion, but an entirely passive one, similar to that which is produced by exertion, it is mistaken for an active congestion, while in fact it is only an attack of eclampsia or epilepsy.

Let those of our colleagues who devote most of their attention to the diseases of women in child-bed and children, recall their experiences; and probably they will partake of my opinion. Dr. Meniere has observed for a long time a large number of patients who are suddenly seized with vertigo, nausea and even vomiting, who fall upon the ground after having walked like drunkards, rise with difficulty, remain pale, covered with a cold sweat, almost in a comatose state; and see these accidents very frequently recurring. The first attacks are considered cerebral congestions and are vigorously treated by bleeding, leeches and purgatives. The frequent relapses modify gradually the diagnosis, but the patients become exceedingly uneasy about them, and especially the doctors, and all enlightened persons who are aware of the seriousness of cerebral lesions.

In the vast majority of cases, patients affected with these cerebral troubles, soon perceive noises in their ears, often even the hearing becomes embarrassed, and these unnatural sounds cause these persons who wish to free themselves from such an annoyance, to seek the aid of the physicians of the asylum for the deaf and dumb at Paris. It is easy, then, to prove that one ear and often even both are singularly enfeebled, and M. Meniere has collected hundreds of observations establishing the fact that these supposed lesions of the brain are really lesions of the auditory apparatus. He has pursued these researches with extreme care, and he has been able to prove that the starting point of these phenomena is in the internal ear. We will let our colleague bring here the result of so highly interesting a study. It will suffice for us to say that the greater part of the troubles so improperly designated under the title of apoplectiform cerebral congestion have their
seat in the semi-circular canals, that the lesions of these organs produce vertigos and sympathetic vomiting, take away the power of the limbs, and bring about sudden loss of consciousness; in a word that many of the so-called lesions of the brain belong exclusively to the auditory apparatus.

There is still another disorder which is constantly designated by the title of cerebral congestion. I speak of vertigo connected with gastric disorders. This varied form of nervous disease is characterized by the following phenomena. If the patient makes a sudden motion in bed, the bed seems to turn round and carry him with it in its motion; if he rises, and especially if, having risen, he looks upwards, the vertigo becomes more excessive. As objects turn around him, he reels, and sometimes is unable to stand. At the same time, he experiences an insupportable sickness at his stomach, and very often vomits. These singular attacks are called by the patients rushes of blood to the head, and we must say, the greater part of physicians partake of this idea. They bleed, they apply cups and leeches, give mustard foot-baths, and in a word, do everything to dispel this imagined congestion, which they increase by their strange treatment.

The vertiginous diseases of which I have spoken are rather akin to syncope, and consequently are just the opposite to congestion; and, strange as it may appear, it is nevertheless true that too many physicians still do not recognise the tendency to syncope, and confound it with cerebral congestion. Nevertheless, gentlemen, as I do not wish to exaggerate, I will suppose that the two states that I have been describing are unknown to physicians, and I will suppose that they are never taken for cerebral congestions. But there is an attack which often accompanies hemorrhages of the brain and which, by the generality of physicians, is considered a congestion.

I explain myself. When a patient is seized with apoplexy, whether this apoplexy be caused by a cerebral hemorrhage, whether it depend upon a softening, which is more frequently the case than it is acknowledged or thought to be, or whether it be the result of an embolus, or at least of a sudden obliteration of one of the principal arteries at the base of the brain; when, I say, a patient is seized with apoplexy, there is sometimes a sudden loss of consciousness, and the dullness of the intellect, and the loss of the power of motion last several hours or even days, then everything is restored to a natural condition, with the exception of a slight hemiplegia, which diminishes slowly and finishes by disappearing after some months. As the first attacks have been almost fulminant, and as there
does not seem to be a sufficient relation between the severity of these first phenomena and the ulterior troubles of intellect, sensibility and motion, they say that the cerebral hemorrhage has been accompanied by a congestion; that the congestion, an essentially transitory phenomenon, has produced the apoplectic attacks properly so-called, and that when it has passed away, it has left this slight hemorrhage together with another slight hemorrhage which has followed these severe apoplectic attacks.

I do not wish absolutely to deny the existence of such a congestion, and I even acknowledge that I am tempted to admit it in a certain degree; but there is another phenomenon which has not been sufficiently taken into account, at least so far as I know. I wish to speak of what I have called the cerebral astonishment. When the brain suddenly experiences a tearing and a compression, it bears this grave lesion with an impatience which varies according to the individual, but which can be borne to a very great extent by certain persons. I will offer as an example one of the traumatic lesions of the brain. When a soldier receives a ball in his head, or when in a fight, an individual receives a stab from a knife which penetrates into the brain, they are thrown to the ground as if they had been struck by a bludgeon; but little by little, notwithstanding the intra-cranial effusions of blood which are the consequence of the wound, and even notwithstanding the inflammatory congestion which is inseparable from the laceration of the tissues, intellect, sensibility and power of motion return sometimes with wonderful rapidity, and thus afford, to the inexperienced surgeon, hopes which are never realized. This immediate stupor is what I have called the cerebral astonishment, and however incorrect this appellation which I will, willingly renounce, may be, still the fact always exists and can be contested by no one.

Experiments upon animals give still more positive results. If one trephine the skull of a dog or a rabbit, and introduce a small ball of lead through an incision in the dura mater, between the skull and the surface of the brain, one will observe at the very outset, phenomena of stupor, which rapidly pass off, to be replaced by hemiplegia which is proportionate to the amount of compression.

In this experiment one cannot plead cerebral concussion as a cause—one must allow that the brain is in a manner surprised by an accident which shows itself in transitory disturbances. Am I not, then, right in supposing that when a sudden extravasation of blood takes place in the striated body or
On Contraction of the Palmar Fascia, and its Mode of Treatment. By Wm. A. Elliott, F. R. C. S. I., Surgeon to the Whitworth Hospital, Drumcondra.

The following cases, illustrative of an affection which has received, from time to time, so much professional investigation, may, I trust, prove, in some degree, of practical interest.

Case 1.—Mr. F. B. æstat. 27, consulted me in June, 1853, for contraction of the left hand, which, upon examination, presented the following appearances:

The little finger was flexed permanently to a right angle upon the palm; the deformity seemed to engage the metacarpo-phalangeal articulation chiefly, and was evidently the result of a contracted condition of the corresponding portion of the palmar fascia, which was distinctly to be seen and felt as a hard prominent cord leading from the anterior annular ligament of the carpus downwards to the root of
the finger. The adjoining portion of the palmar aponeurosis seemed also to have suffered, for the ring finger was likewise slightly flexed upon the palm, but not by any means to such an amount as the little finger.

On attempting to extend the affected fingers upon the metacarpus, the diseased portion of the palmar fascia became tense, rigid and prominent. On the contrary, it became flaccid, and nearly disappeared when the joints in question were flexed upon the palm.

The integuments in the palm of the hand were thickened and tightly stretched over the fascial cord; there was also the usual appearance of wrinkled or arched folds, with their concavities looking downwards and their convexities upwards, which apparently adhered closely to the subjacent structures. The patient stated that when about the age of 14 years he first experienced some degree of tension (but unaccompanied with pain) in the palm of the hand. This insensibly increased, but his attention was ultimately arrested by the state of the little finger, which by a slow contractile process, had gradually become flexed, until at length it formed a right angle with the palm; the power of extension being lost to a degree commensurate with the aponeurotic shortening.

I endeavored, but in vain, to overcome this rigid contraction by means of an instrument adapted to the purpose. But this procedure, I confess, was adopted rather to test the amount of resistance offered by the fascia, than for any expected benefit likely to result from the trial.

The late Sir Philip Crampton and Dr. Adams met me in consultation, and it was unanimously agreed that the nature of the case was such as to demand operation. The subcutaneous sections of the contracted fasciae were suggested, but Sir P. Crampton objected, preferring a different operation, which he subsequently performed in the following manner:

One long incision was made on a line parallel with the tight cord, and to its inner side. The scalpel was then passed beneath the fascia in different parts, dividing it at the same time from behind forwards. This had the effect of liberating the contraction to a certain extent, but the flexion of the finger was not entirely overcome until the bifurcated portion of the fascia which is inserted into the first phalanx was severed. This being done, the finger was immediately released from its former state of contraction.
The wounds were then dressed with lint, and a weak spirit lotion directed to be applied for some hours.

The day after operation the hand became oedematous, painful, and very sensitive to the touch, and in this state it continued almost throughout the entire period of time occupied in the subsequent treatment, which was thus rendered extremely difficult. Notwithstanding this painful swelling, it was imperative to apply for a few hours daily, the instrument for forcible extension of the hand and fingers, and at night a light wooden splint to prevent contraction, and also to afford ease to the patient.

The treatment of the incisions consisted merely in the application of water dressing covered with oil silk and supported by loose bandages, which course was pursued until cicatrisation was perfected. It is unnecessary to detail the daily changes which occurred during the healing of the wounds and the removal of the contraction. I may, however, observe, that it was with much difficulty these twofold indications were simultaneously fulfilled for the reasons already stated.

This case terminated most successfully, having occupied five weeks of very diligent management from the day of operation. Patient has now, for upwards of seven years, been in the enjoyment of perfect use of his hand.

Case 2.—Mr. J. McG., at 46, consulted me in Sept. 1857, for contraction of the palmar fascia engaging the middle and ring fingers of the right hand. In February, 1858, the patient returned to Dublin for the purpose of undergoing the necessary treatment for the removal of this affection, when the following notes were taken of his case:

The palmar fascia feels slightly tense when traced downwards from the annular carpal ligament. In the palm of the hand it is prominent, hard and unyielding. Near the metacarlo-phalangeal articulation it appears to be abruptly identified with a mass of hypertrophied integument, thick, firm and elastic in its nature. In this thickened mass the outlines of the contracted fascia are lost, but they are again easily felt where the fascia passes downwards to form the bifurcation for supplying the two middle fingers. The middle and ring fingers are flexed, forming nearly right angles with the palm; they are also rigidly approximated to each other. Two sharp prominent ridges exist along the opposed edges of the affected fingers; these ridges extend from the metacarlo-phalangeal articulations to the ungual
phalanges, affording such increased measurement in the antero-posterior direction as almost to convey the erroneous idea that the sheaths of the tendons had been ruptured.

The integuments in the palm of the hand present nearly the same wrinkled arrangement which was described in the former case, feeling also tense, and as if adherent at different points to the subjacent structures, along the course of the contracted fascia.

Patient cannot assign any cause for the invasion of this affection, which commenced about sixteen years previous to my seeing him. The contraction first made its appearance in the palm of the hand, near the middle finger, and gradually extended to the ring finger, causing flexion of both, but without at any time giving rise to the least pain.

On the 16th February, 1858, I liberated the contracted hand and fingers by subcutaneous section in the following manner:

Having placed the hand upon the instrument, and by this means having rendered the fascia tense throughout its entire extent, the limb being firmly held by an assistant, I first divided the palmar portion of the fascia which lay behind the hypertrophied integument by passing a small knife horizontally under the skin and cutting freely backwards; it separated with a sharp crepitating sound. The palm of the hand immediately became open and flaccid, but the fingers (particularly the middle) still remained somewhat flexed. I then divided by another puncture the bifurcated portion of fascia supplying the inner side of the middle finger; this being effected, all tension was removed.

In forty-eight hours after operation, the dressings were removed, and finding both wounds healed, I commenced the subsequent treatment, which was conducted in the same manner as described in the former case, making use of the apparatus for forcible extension during part of the day, and applying a light splint at night.

In twelve days from the date of the operation, patient returned home, all contraction in the hand and fingers being quite removed. He had also commenced to make use of the limb.

We must confess that our knowledge of the etiology of this disease is still imperfect, although modern surgery has revealed the fact that it is of a curable nature. In the incipient stages I have succeeded in removing the contractions by simple mechanical means; but as the disease progresses,
the fascia undergoes a process of rigid shortening, and ultimately resists the most forcible extension that we can with safety apply to it. From this state it will be impossible to release the hand until the contracted fascia has been divided; but as the fascia is the active agent in producing the deformity, it is the only structure requiring section. The tendons and skin are blameless, as is testified by morbid specimens of this disease.

Patient has now perfect use of the limb without the slightest appearance of contraction, three years having elapsed since the period of his treatment.

Doctor Adams in the "Cyclopaedia of Anatomy and Physiology," vide Abnormal Conditions of the Hand, gives a clear and comprehensive description of this disease. He ascribes the flexion of the hand and fingers to contraction of the palmar fascia, its palmar and its digital portions being usually both in fault. This was also the opinion of Dupuytren, to whom the profession is indebted for having been the first to elucidate the nature and seat of this affection.

In December, 1841, Dr. Mayne exhibited before the Pathological Society in Dublin a good specimen of this disease. He states: "The deformity consisted in a firm permanent flexion of the little finger upon the palm. From the palm a firm cord could be distinctly felt proceeding up the anterior part of the carpal annular ligament. The integuments were found to be firmly united to the aponeurosis at the wrinkle. The palmar fascia was natural, except its fourth fasciculus, which was very strong and contracted. The flexor tendons were natural. The deformity appeared to depend upon the contracted state of the fourth fasciculus of the palmar aponeurosis, and a similar contraction of the sheaths of the tendons in front of the fingers. It should be observed that there was in the specimen a branch of the palmar artery running very near and parallel to the band, and that this vessel might have been divided, if operation had been resorted to."

It appears to me that this disease does not strictly obey the laws ascribed to it by those authors who attribute its origin either to a peculiar constitutional diathesis, or to the laborious occupation of the individual, for I have examined carefully many persons suffering from this affection, whose statements were opposed to such opinions, and it is at least certain that the great majority of the cases which have
fallen under my observation, occurred in persons whose occupations were by no means of a laborious nature.

By some surgeons attention has been directed to the particular finger which first becomes affected. In a practical sense, this is unimportant, but we find the disease usually commencing either in the middle, ring, or little finger, in each of which I have seen it originate. We sometimes observe this affection existing in both hands of the same individual. Lately I examined a singular case, in which not only both hands were engaged, but the contraction had extended to both thumbs, and to all the fingers.

It is of the utmost importance that we should select the most eligible operation for the removal of the deformity under consideration. Duplaytren's mode consisted in making transverse and occasionally semilunar incisions, about six lines in length, opposite the metacarpo-phalangeal articulation, and also in the palm of the hand, or, as occasion required, in front of the phalanges, so as to enable the fascia to be fully divided.

Sir Philip Crampton considered this disease to be of a peculiarly intractable character, and for its removal recommended that a free incision should first be made parallel with the tight cord and in its entire length. This he considered most important, as by so doing the operator would be enabled to divide with greater ease and certainty the contracted portions of fascia.

The subcutaneous operation seemed to me preferable, and the advantages which it possesses are obvious—viz., it is comparatively free from risk or pain. The punctures heal in a few hours, thereby permitting the subsequent treatment to be conducted without embarrassment, and wounds are avoided which would necessarily be kept open by the process of extension, and when healed might eventuate in the formation of hard and contractile cicatrices, possessing a tendency to reproduction of the original deformity.

The comparatively short duration of time in which (by this operation) we are enabled to cure the disease, should, I consider, entitle it to additional recommendation. In adopting the subcutaneous operation it will be necessary to select a proper situation at which to make the puncture. The most prominent portion of the fascial cord will be found invariably lying in front of the superficial palmar arch of arteries; and as we cannot determine the depth to
which our incision may require to be carried, this situation should be avoided. It will be found more satisfactory, and attended with less risk, to make the puncture about midway between the lowest transverse line in the palm and the root of the affected finger.

Whatever may be the nature of the operation deemed advisable in these cases, the subsequent treatment will require our utmost attention, and much difficulty may be obviated by the use of the instrument which I constructed some years since, and have found most efficacious in the removal of many forms of digital contractions. In its construction it simulates somewhat the motions of the phalanges, and may be applied to one or all the fingers, as the case may demand. It should be worn for some hours at a time, but the period must be regulated by the feelings of the patient.—Dublin Medical Press.

Directions to Army Surgeons on the Field of Battle. By G. J. Guthrie, Surgeon General to the British Forces during the Crimean War. (From his Pamphlet on the Hospital Brigade.)

1. Water being of the utmost importance to wounded men, care should be taken when before the enemy, not only that the barrels attached to the conveyance-carts are properly filled with good water, but that skins for holding water, or such other means as are commonly used in the country for carrying it, should be procured and duly filled.

2. Bandages or rollers, applied on the field of battle are, in general, so many things wasted, as they become dirty and stiff, and are usually cut away and destroyed, without having been really useful; they are not therefore forthcoming when required, and would be of no use.

3. Simple gun-shot wounds require nothing more, for the first two or three days, than the application of a piece of wet or oiled linen, fastened on with a strip of sticking-plaster, or, if possible, kept constantly wet and cold with water. When cold disagrees, warm water should be substituted.

4. Wounds made by swords, sabres or other sharp-cutting instruments, are to be treated principally by position. Thus,
Directions but if a wound be immediately removed, be tied, and the oozing stopped by a sponge. After a few hours, when the oozing is arrested, the sponge should be removed, and the head brought down towards the chest, and retained in that position without ligatures; if this is done too soon, the sufferer may positively be suffocated by the infiltration of blood into the areolar tissue of the parts adjacent.

5. If the cavity of the chest is opened into by a sword or lance, it is of the utmost importance that the wound in the skin should be effectively closed, and this can be done by sewing it up as a tailor or a lady would sew up a seam, skin only being included; a compress of lint should be applied over the stitches, fastened on by sticking plaster. The patient is then to be placed on the wounded side, that the lung may fall down, if it can, upon, or apply itself to the wounded part, and adhere to it, by which happy and hoped-for accident life will in all probability be preserved. If the lung should be seen protruding in the wound, it should not be returned beyond the level of the ribs, but be covered over by the external parts.

6. It is advisable to encourage previously the discharge of blood from the cavity of the chest, if any have fallen into it; but if the bleeding from within should continue, so as to place the life of the sufferer in danger, the external wound should be closed, and events awaited.

7. When it is doubtful whether the bleeding proceeds from the cavity of the chest, or from the intercostal artery, (a surgical bugbear,) an incision through the skin and the external intercostal muscle will expose the artery close to the edge of the rib having the internal intercostal muscle behind it. The vessel thus exposed may be tied, or the end pinched by the forceps, until it ceases to bleed. Tying a string round the ribs is a destructive piece of cruelty, and the plugs, &c., formerly recommended, may be considered as surgical incongruities.

8. A gun-shot wound in the chest cannot close by adhesion, and must remain open. The position of the sufferer should therefore be that which is most comfortable to him.
A small hole penetrating the cavity is more dangerous than a large one, and the wound is less dangerous if the ball goes through the body. The wounds should be examined, and enlarged if necessary, in order to remove all extraneous substances, even if they should be seen to stick on the surface of the lungs; the opening should be covered with soft oiled or wet lint—a bandage when agreeable. The ear of the surgeon and the stethoscope are invaluable aids, and ought always to be in use; indeed, no injury of the chest can be scientifically treated without them.

9. Incised and gun-shot wounds of the abdomen are to be treated in nearly a similar manner; the position in both being that which is most agreeable in the patient, the parts being relaxed.

10. In wounds of the bladder, an elastic catheter is generally necessary. If it cannot be passed an opening should be made in the perineum for the evacuation of the urine, with as little delay as possible.

11. In gun-shot fractures of the skull, the lower broken pieces of bone, and all extraneous substances are to be removed as soon as possible, and depressed fractures of bone are to be raised. A deep cut made by a heavy sword through the bone into the brain generally causes a considerable depression of the inner table of the bone, whilst the outer may appear to be merely divided.

12. An arm is rarely to be amputated, except from the effects of the cannon-shot. The head of the bone is to be sawn off, if necessary. The elbow-joint is to be cut out, if destroyed, and the sufferer, in either case, may have a very useful arm.

13. In a case of gun-shot fracture of the upper arm, in which the bone is much splintered, incisions are to be made for the removal of all the broken pieces which it is feasible to take away. The elbow is to be supported. The forearm is to be treated in a similar manner; the splints used should be solid.

14. The hand is never to be amputated, unless all, or nearly all its parts are destroyed. Different bones of it and of the wrist are to be removed when irrecoverably injured, with or without the metacarpal bones and fingers or the thumb; but a thumb and one finger should always be preserved when possible.

15. The head of the thigh bone should be sawn off when broken by a musket ball. Amputation at the hip joint
should only be done when the fracture extends some distance into the shaft, or the limb is destroyed by cannon-shot.

16. The knee-joint should be cut out when irrecoverably injured; but the limb is not to be amputated until it cannot be avoided.

17. A gun-shot fracture of the middle of the thigh, attended by great splintering, is a case for amputation. In less difficult cases, the splinters should be removed by incisions, particularly when they can be made on the upper and outer side of the thigh. The limb should be placed on a straight, firm splint. A broken thigh does not admit of much, and sometimes of no extension, without an unadvisable increase of suffering. An inch or two of shortening in the thigh does not so materially interfere with progress as to make the sufferer regret having escaped amputation.

18. A leg injured below the knee should rarely be amputated in the first instance, unless from the effects of a cannon-shot. The splinters of bone are all to be immediately removed, by saw or forceps, after due incisions. The limb should be placed in iron splints, and hung on a permanent frame, as affording the greatest comfort, and probable chance of ultimate success.

19. An ankle-joint is to be cut out, unless the tendons around are too much injured, and so are the tarsal and metatarsal bones and toes. Incisions have hitherto been too little employed in the early treatment of these injuries of the foot for the removal of extraneous substances.

20. A wound of the principal artery of the thigh, in addition to a gun-shot fracture, renders immediate amputation necessary. In no other part of the body is amputation to be done in the first instance for such injury. Ligatures are to be placed on the wounded artery, one above, the other below the wound, and events awaited.

21. The occurrence of mortification in any of these cases will be known by the change of color in the skin. It will rarely occur in the upper extremity, but will frequently do so in the lower. When about to take place, the color of the skin of the foot changes, from the natural flesh color to a tallowy or mottled white. Amputation should be performed immediately above the fractured part. The mortifica-

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22. When this discoloration has not been observed, and the part shrinks, or gangrene has set in with more marked appearances, but yet seems to have stopped at the ankle, delay is, perhaps, admissible, but if it should again spread, or its cessation be doubtful, amputation should take place forthwith, although under less favorable circumstances. The mortification is becoming, or has become constitutional.

23. Bleeding, to the loss of life, is not a common occurrence in gun-shot wounds, although many do bleed considerably, seldom, however, requiring the application of a tourniquet as a matter of necessity, although frequently as one of precaution.

24. When the great artery of the thigh is wounded (not torn) across the bone being uninjured, the sufferer will probably bleed to death, unless aid be afforded, by making compression above, and on the bleeding part. A long, but not broad stone, tied sharply on with a handkerchief, will often suffice until assistance can be obtained, when both ends of the divided or wounded artery are to be secured by ligatures.

25. The upper end of the great artery of the thigh bleeds scarlet blood, the lower end dark venous-colored blood; and this is not departed from in a case of accidental injury, unless there have been previous disease in the limb. A knowledge of this fact or circumstance, which continues for several days will prevent a mistake at the moment of injury, and at a subsequent period, if secondary hemorrhage should occur. In the upper extremity both ends of the principal artery bleed scarlet blood, from the free collateral circulation, and from the anastomoses in the hand.

26. From this cause, mortification rarely takes place after a wound of the principal artery of the arm, or even of the arm-pit. It frequently follows a wound of the principal artery in the upper, middle, or even lower parts of the thigh, rendering amputation necessary.

27. It is a great question, when the bone is uninjured, where, and at what part, the amputation should be performed. Mortification of the foot and leg, from such a wound, is disposed to stop a little below the knee, if it should not destroy the sufferer; and the operation, if done in the first instance, as soon as the tallowy or mottled appearance of the foot is observed, should be done at that part; the wound of the artery, and the operation for securing the ves-
sel above and below the wound, being left unheeded. By this proceeding, when successful, the knee-joint is saved, whilst an amputation above the middle of the thigh, is always very doubtful in its result.

28. When mortification has taken place from any cause, and has been arrested below the knee, and the dead parts show some signs of separation, it is usual to amputate above the knee. By not doing it, but by gradually removing the dead parts, under the use of disinfecting medicaments and fresh air, a good stump may be ultimately made, the knee-joint and life being preserved, which latter is frequently lost after amputation under such circumstances.

29. Hospital gangrene, when it unfortunately occurs, should be considered to be contagious and infectious, and is to be treated locally by destructive remedies, such as nitric acid, and the bivouacking or encamping of the remainder of the wounded, if it can be effected, or their removal to the open air.

30. Poultices have been very often applied in gunshot wounds, from laziness, or to cover neglect, and should be used as seldom as possible.

31. Chloroform may be administered in all cases of amputation of the upper extremity and below the knee, and in all minor operations; which cases may also be deferred, without disadvantage, until the more serious operations are performed.

32. Amputation of the upper and middle parts of the thigh are to be done as soon as possible after the receipt of the injury. The administration of chloroform in them, when there is much prostration, is doubtful, and must be attended to, and observed with great care. The question whether it should or should not be administered in such cases being undecided.

33. If the young surgeon should not feel quite equal to the ready performance of the various operations recommended, many of them requiring great anatomical knowledge and manual dexterity (and it is not to be expected that he should) he should avail himself of every opportunity which may offer of perfecting his knowledge.

The surgery of the British army should be at the height of the surgery of the metropolis; and the medical officers of that service should recollect, that the elevation at which it has arrived has been on many points principally due to the labors of their predecessors, during the war in the Pe-
ninsula. It is expected, then, that they will not only correct any errors into which their predecessors may have fallen, but excel them by the additions their opportunities will permit them to make in the improvement of the great art and science of surgery.—Lancet.

Modem Lithottrity. Dr. Civiale's Clinical Experience. To the Editor of the Lancet.

Sir—I have just received a letter from my friend and former instructor, Dr. Civiale, of Paris, in which he requests me to translate and send to you for publication the result of his practice in operating for stone in the bladder during the past year (1860.) Dr. Civiale's reputation as the inventor and perfector of modern lithottrity is so well known that I lose no time in sending you this interesting document.

It may be in the memory of some of your readers that at the Medical Society of London, and in the Lancet, of Jan. 21st, 1760, I called attention to the following proposition, as one which appeared to me to be of the very highest importance: That stone in the bladder may, by the exercise of fair intelligence and skill, be deprived of nearly all its severity and danger to life; since it may, in the great majority of cases, be detected in its early stage when of small size, and because its destruction in that stage may be accomplished with safety and certainty by lithottrity.

I cannot forbear appealing to the following letter as a remarkable illustration of that great and pregnant truth.

The facts of this letter suggest several objects for critical remark to the English surgeon, which I shall not touch upon here. Taken altogether, I think that English experience amongst those who practice lithottrity, will not much suffer by comparison with the excellent results of the great master's work.

The following is a literal translation of the article which Dr. Civiale has just published in the Gazette des Sciences, &c., and which he has sent me for the purpose named.

I am, sir, your obedient servant,

Henry Thompson, F. R. C. S.
I treated, in 1860, 54 patients affected with stone in the bladder; 39 in my private practice, and 18 in the hospital.

A. Private Patients.—Twenty-six of these patients had stone for the first time; 10 had been already operated on by other surgeons or by myself; the stone having reappeared, fresh operations were necessary.

I operated on 26 of these patients by lithotrity; 24 are cured; in 2 others I was obliged to relinquish the operation, which appeared to aggravate the morbid condition of the bladder. One of these patients has died; the other still lives, and the stone remains in the bladder.

All those calculous patients who were most favorably circumstanced, whose organs were still sound and in good health, and who had no other disease than a small stone, obtained a rapid and easy cure. For this class of patients the application of lithotrity appears to me to have reached great perfection; in fact, the stone is destroyed in a few minutes, and its debris are expelled with the urine; all suffering ceases, and the health is re-established and maintained. Surely this is all one can desire in the treatment of calculus.

But lithotrity gives such good results only when its application is restricted to favorable cases, in which the stone has not had time to grow large, and to produce in the bladder lesions capable of altering the form and natural conditions of that organ. I hasten to add, however, that the proportion of favorable cases augments every day, and that they will become more and more numerous in proportion as calculous patients, informed as to their condition by their medical attendants submit themselves to operation at the outset of the malady.

Ten of those treated had not displayed this prudence; they only sought the aid of art when their existence had become insupportable on account of incessant pain.

In two of them the diseased condition of the urinary organs offered an obstacle to the application of lithotrity, and as lithotomy was equally contra-indicated, death occurred from the progress of the complaint.

Four having large stones were operated on by lithotomy; one adult obtained a rapid and complete cure, the wound having cicatrized by the tenth day; in another adult the
convalescence was tedious, and the cure incomplete. Two old men died in the second week after the operation.

Two patients are still under treatment; one will be operated on by lithotrity, the other by lithotomy.

In two others, who became ill at Paris when the winter set in and returned home, the treatment has been postponed until the spring.

B. Hospital Patients.—Amongst the 18 calculous patients admitted under my care, there were 3 women and 15 men, all adults, some old people.

The first of these women, who had suffered during a long period of time, was so bad that any operation was contraindicated; and the patient returned to her family.

The second was in favorable condition as regards her general health, but the calculus was engaged in the urethra, where it was maintained by violent contraction of the bladder. A division of the canal sufficed to accomplish the extraction. This proceeding appeared to me, in these circumstances, to be preferable to that of crushing, which would have been very tedious and painful. The patient was rapidly cured.

The third woman, an account of whom I have published, presented one of those extraordinary cases which one meets with at distant intervals. The stone, a phosphatic one, was formed upon a mass of teeth, of little bones, and of hair, arising from a hair-cyst, which had opened into the bladder. All these bodies and the stone itself were successfully extracted by lithotrity.

Four of the male patients were not in the condition which the application of lithotrity demands. Two were cut; one was cured, but the other has still a fistula. The third refused to submit to the knife, which indeed offered small chance of success: he died of renal disease. The fourth is under treatment.

Another male patient was the subject, at the same time, of a stone of middle size and of strangulated hernia, requiring immediate operation, from which he died.

The 10 remaining patients submitted to lithotrity were freed from the stone, but the cure in all was not complete. Amongst them, 2 retained some pain and disturbance in the functions of the bladder, arising from organic lesions of that viscus, and against which lithotrity avails no more than lithotomy.
The recent cases observed at the Hospital Necker present a fact worthy of notice.

Calculus patients form two great classes. In one, which embraces two-thirds of the cases, the organs retain their natural condition. Indeed it is only occasionally, and especially after bodily exercise, that the stone provokes some functional disorders, which cease by repose. Here the stone forming of itself the whole malady, it suffices to destroy or extract it by surgical operation for the patient to obtain a complete and speedy cure.

In the other class, the phosphate of lime, or the ammoniaco-magnesian phosphatic calculi form and are developed, under the influence of a morbid condition of the urinary apparatus. It is not uncommon for this state to persist after operation, to deprive the patient of the complete benefit of treatment, and even to favor the development of a new stone. These cases predominate in the foregoing account.

To resume. Of 54 calculous patients, of which I have just presented a table, 37 have been treated by lithotrity. In 2 cases I was obliged to relinquish the treatment; 1 died; another retains his stone; 2 of them have not obtained a complete cure, because the stone has not formed the sole malady, but they are greatly relieved. The rest are cured.

7 were submitted to lithotomy, which saved 4 of of them; but in 2 of these the cure is incomplete.

10 have not been submitted to any operation; 3 have died from the progress of the malady, and 1 after the operation for hernia; 1 continues to live with his stone. 3 are under treatment, and will be submitted, 1 to lithotrity and 2 to lithotomy. In 2 cases the operations are postponed.

These facts prove anew the danger of long retaining the stone, and the utility of lithotrity when we apply it at an earlier period of the complaint.—Lancet.

Lecture on Sub-Involution of the Uterus after Delivery. By J. Y. Simpson, M.D. F.R.S.E., Professor of Medicine and Midwifery in the University of Edinburgh.

Gentlemen:—I have seen this morning a case of a peculiar form of uterine hypertrophy, to which I beg you will
allow me to take this opportunity of directing your attention. The patient in this instance is a lady from America, who has suffered from disordered menstruation, and a feeling of weight and great discomfort in the pelvis, since the birth of her last child. She has, in short, most of the rational symptoms of a fibroid tumour of the uterus, but on making a physical examination, I found there was no bruit over the uterus, while that organ was equally enlarged to about the size of a uterus in the third month of pregnancy and readily admitted a sound to the extent of three and a half or four inches into its interior. Now, although I am not aware that any of the older authors have pointed out particularly this peculiar form of uterine enlargement, yet I am sure it is not at all uncommon. There are at present in our ward in the Hospital two patients who are the subjects of this disease, and in both of whom the hypertrophy of the uterus is complicated, as it not unfrequently is with retroversion of the organ. Let me read to you the history of these two cases as they have been briefly drawn up by the Clinical Clerk, Mr. Gooding:—

Case 1.—Margaret R., aged 22, married, was admitted on October 19, 1860. Five months after the patient's marriage, which took place in March, 1859, she had a miscarriage; the child lived three hours. Six months and a half after this she was again prematurely delivered of a child, which survived its birth only a quarter of an hour; both of these miscarriages she attributes to over exertion. She again became pregnant and experienced, at about the same time the previous miscarriages had occurred, symptoms threatening the loss of the fetus. She was attended by a Medical man, who enforced rest. After remaining in bed three weeks, these symptoms passed off; and in May, 1859, she was delivered at the full time, after an easy labor, of a male child, which, however, only lived sixteen days. The lochia ceased in three days, but was followed by a yellow discharge, from the continuance of which, and the existence of a disagreeable sensations in the epigastrium, and general debility, she applied to Dr. A. R. Simpson, under whose treatment she regained her health, and continued in good health till March, and in April last she was again seen by Dr. Simpson, who found her pregnant, with ulceration of the os and retroversion of the uterus. Two months after she lost another fetus, at about the sixth and a half month of gestation. In two weeks she menstruated. In conse-
quence of her feeble state of health, she went into the country; during her stay she menstruated profusely for nine days. Only once since this, about ten weeks ago, she menstruated one day.

State on Admission.—The patient was very weak and nervous. She complains of occasional pains about the chest, and has a slight cough. She also complains of weight and uneasiness in the pelvis, with a feeling of bearing down at "the back passage." There is frequent desire to go to stool, and a feeling of something being left after rising. At times there is a yellow discharge from the rectum. Micturition is more often performed than usual. The uterus is much enlarged and retroverted, pressing on the rectum, and lying low in the pelvis. The os is directed anteriorly, and the uterine sound enters easily for more than three inches.

I need not trouble you with any further detailed account of her treatment, and of her progress during her residence in the Hospital, but I shall content myself with merely stating that the condition of the womb has undergone a marked change for the better, for it has become reduced to the normal size, and although still retroverted to some extent, yet it has become so far righted in its position, that the patient experiences no discomfort so long as she wears a vaginal pessary of the peculiar form that I shall afterwards have occasion to describe to you.

Case 2.—Agnes R., aged 17, married, was admitted on November 20, into the Royal Infirmary. The patient states that since her marriage, which took place six years ago, she has had two children and one abortion, which occurred eighteen months ago, at the second month of gestation. She has not been pregnant since that time. She had enjoyed good health previous to the occurrence of the abortion, on the fifth day after which she had rigors, and in a day or two pain in the hypogastric region, and in the back and loins. On the eighth day when she arose from bed, she found she could not walk without great difficulty, and when seated could rise only with great suffering. In a short time the severity of these symptoms abated, but ever since she has experienced similar pains in a less degree. The menstrual function is regularly performed. In the intervals between menstruation there is a slight leucorrhea. She has for a long time been obliged to pass her water much more frequently than before. There is a slight amount of
pain when at stool, otherwise the bowels are unaffected. The uterus is retroverted and considerably enlarged, the uterine sound passing only with the point directed backwards towards the promontory of the sacrum, and entering at once to an extent of nearly three inches.

Both of these patients, then, are suffering from enlargement of the womb, consequent on an arrest of the retrograde metamorphosis that normally occurs in that organ after parturition. I have, I repeat, seen many cases where this form of uterine hypertrophy existed to a greater or less extent, and I assure you you will find the subject of sufficient scientific interest and sufficient practical importance to demand for it your most careful study and attention. Let me tell you briefly what is

The Pathological Nature of the Disease.

After parturition, as you are aware, the greatly enlarged uterus begins regularly to involve or absorb, and rapidly diminishes in size, till it has been reduced almost to its pristine dimensions. I have had occasion in another department of our course to call your attention to the wonderful changes that go on in the uterus in consequence of impregnation, and to tell you how, from being a small body two or three inches long, it comes in the short space of nine months, to attain the length of a foot or more, while it is correspondingly enlarged in all its other dimensions and diameters. And I may here repeat the conviction that I then expressed, that if ever the laws of nutrition are to be clearly made out, the inquiry will probably be most successfully pursued by investigating these laws as they are seen in operation on a large and gigantic scale in this very organ; for in no other organ, so far as I remember, do we ever see nutrition and growth going on so rapidly as here, where out of a mere mass of nucleated fibres and cells an enormous body of numerous and well marked muscular fibres become developed within the course of the nine months of pregnancy. Hardly less wonderful than this great development of the uterine walls during the progress of gestation, is the still more sudden diminution that occurs in these walls after parturition has been completed. The muscular fibres—perhaps weakened and exhausted as a result of their violent action during the parturient process, and so rendered prone to degenerate—and deprived also to some degree, of the supply of blood brought to them so
profusely during the time that the uterine circulation was so much exaggerated, now undergo, after parturition, a fatty metamorphosis, in consequence of which they almost all melt down and disappear; so that in the brief space of five or six weeks the whole organ dwindles down and diminishes to nearly its original dimensions. The muscular walls of the uterus are not absorbed as muscle, but like many other effete structures, they first undergo fatty degeneration and are absorbed as fat. This fatty degeneration commences on the inner layers of the walls, and passes from them to the outer layers. The fatty metamorphosis of the uterine muscular fibres appears under the microscope a few days after delivery, as a series of glistening particles deposited in the course of each individual fibre. Now the patients with whose cases I introduced my present observations, are suffering from this curious condition of the uterus, that after the birth of their last children, this retrograde metamorphosis of the uterus has not taken place during the puerperal month, or rather, let me say, has taken place only to such an imperfect degree that the uterus is of the size we usually see it have at the end of the first week or so after delivery. They are suffering, then, from a hypertrophy of the uterus which is pathological in its permanency, but which results from a hypertrophy purely physiological in its origin.

Its Aetiology.

What, you will be ready to ask, is the cause of this enlargement of the uterus remaining permanently? How is it that the retrograde changes in the uterus become arrested and the absorption or involution of its walls is prevented? To these questions it would be difficult, or indeed impossible, with our present limited knowledge of the processes of development and degeneration that go on in the uterus, to furnish a satisfactory reply, but let me point out to you some causes which occasionally appear to lead to the production of this hypertrophy from arrested involution of the uterus.

1. Rising too soon after Confinement.—We know that both in the healthy and in the morbid state the uterus is apt to become more congested when the patient assumes the erect position, and that a morbid degree of congestion interferes with the various physiological functions. And we can easily imagine that if a delicate woman gets up too soon after he
delivery, and remains for a lengthened period erect, while the womb is still more than usually large, the circulation in its walls might yet get so impeded, and such an amount of congestion be produced as would prevent the normal changes in its walls, and impede the free absorption of its disintegrated particles.

2. Repeated Miscarriages.—However it may be, we know, further, that in a number of cases an enlarged condition of the uterus of the same nature as that of which I am speaking, results from the frequent and rapid recurrence of a series of miscarriages, or abortions in the same patient. You are aware that a woman who has once aborted is extremely liable again to abort at the same period whenever she again becomes pregnant. In such cases it is, moreover, remarkable that the patient often conceives again in a very short time after the occurrence of the abortion; and when this process has been several times repeated—the uterus undergoing the enlargement of a new pregnancy, before it has had time, as it were, to recover perfectly from the hypertrophy of a proceeding one, the case sometimes ends in a complete disturbance of the normal physiological process of degeneration and diminution in the uterine walls, and the womb is left in a permanently hypertrophied condition.

3. Metritis.—Again, if you inquire minutely into the history of patients affected with this form of disease, and ask them particularly as to whether anything has gone wrong with them in their puerperal state, you will very frequently find, as in the case of the second of our Hospital patients, that within a short time after their confinement they have been the subject of an attack of inflammation in the uterus or ovaries, or neighborhood pelvic organs. They will, perhaps, tell you that a week or two after their child was born they had a shivering, followed by pain in the region of the womb and more or less fever, which compelled them to remain in bed for some time. It would appear as if the occurrence of metritis, or perimetritis, in the puerperal female, exerted such an influence on the substance of the uterus as to prevent the occurrence of those changes that lead normally to its diminution in size.

**Its Semiology.**

The patient whom I have imagined you to be questioning as to the history of her malady, will probably tell you,
further, that after she had recovered so far from her inflammatory attack, and from the consequences of the bleeding and blistering to which she had been subjected for its cure, as to be able to walk about again, she began to be conscious of a feeling of discomfort in the lower part of the abdomen, to which she had never before been accustomed. There is frequently a sense of weight or bearing down of the uterus, of distress in the lower bowel, and of uneasiness in connexion with the action of the bladder, and a weakness, sometimes amounting to actual pain, in the lower part of the back, and, in some cases, a numbness of the lower limbs, which are all new to the patient. She attributes, most likely, these feelings to weakness, and expects that as she gains more strength, the uneasy sensation will disappear. But some months may elapse, and she begins to be disappointed at her never getting entirely relieved of this local trouble; and after lactation is accomplished, if, indeed, she have been able to nurse her child at all, she finds that her menses do not return regularly, or become too profuse and painful. Leucorrhea, too, is sometimes present to a greater or less extent; and altogether the patient is in a state of confirmed and anomalous bad health, that is difficult of endurance. By means, perchance, of tonics and sedatives she strives to regain her health and alleviate her uneasiness and continues for a time to hope that her former strength will still return, and that her ailments will disappear. Gradually, however, the conviction becomes forced upon her that something besides time will be needful for her cure, and that some kind of medical treatment is required for her relief. Accordingly she comes to you, and when you have heard a history such as that I have endeavored to narrate, you come to the conclusion that she is laboring under some disease of the uterus. But what the precise nature of the disease is you will not be able to fix and determine by studying the mere history of the symptoms. To make out a correct differential diagnosis, you must institute an examination of the uterus.

Its Physical Diagnosis.

On placing the hand over the abdomen, you can usually feel the enlarged uterus rising in the form of a tumour out of the pelvic cavity, and lying above the pubes, more especially in those cases where the hypertrophy is very consid-
erable. In all cases you can discover, on making an examination per vaginam, that the vaginal portion of the cervix uteri is enlarged—for this is a form of hypertrophy in which every part of the organ is implicated; and you find the whole uterus to be unusually large and heavy. This kind of local examination is, in the majority of cases, most satisfactorily carried out when the patient is laid on her back; sometimes it is more convenient to have her placed somewhat laterally. But in every instance of this kind you must bear in mind the importance of making an examination with both hands simultaneously—the forefinger of one hand being employed to explore the uterus through the vagina, while the fingers of the other are applied to the fundus through the medium of the anterior abdominal wall. There is, perhaps, no variety of uterine disease in the diagnosis of which this sort of examination can be employed to more purpose than in the case of simple enlargement of the organ. In a few patients the abdominal walls are too thick to admit of your feeling anything very distinctly on palpation; and there are others, still fewer in number, in whom a certain degree of uneasiness renders the necessary pressure painful to the patient. When you have thus got the uterus between the two hands, you can easily recognise the existence of the hypertrophy, and even determine the degree to which it has taken place. You can feel that the swelling is not due to the presence of fibroid masses in the walls of the uterus, for there is no irregularity and no peculiarity in its shape. It has unmistakably the shape and contour of the healthy organ; it is only that organ in a state of equable hypertrophy. Such a condition of matters might still, however, possibly be due to the presence of a fibroid tumour growing from the submucous layers of the uterine wall, and projecting into its interior; and to make sure that there is no such tumour present, you must have recourse to another simple means of exploration, viz., the introduction of a uterine sound.

The cavity of the healthy uterus measures usually, as you know, about two and a half inches in length; and when the sound is introduced, you find its point is arrested at the fundus, when the knob placed on the convex side of the instrument, at two and a half inches from the extremity, has reached the level of the external orifice of the uterus. Where the organ is enlarged, however, the knob I speak of slips past the guiding finger, and the instrument runs up
into the interior to a depth of three or more inches; and when the enlargement of the uterus is of the kind I have been describing as dependent on defective involution of the organ after delivery or miscarriage, the instrument usually slips in at once without the slightest difficulty, for the uterine orifice and canal is preternaturally patent. When, on the other hand, the enlargement is due to the presence of a tumor in the cavity of the uterus, the point of the exploring instrument usually meets an obstruction immediately on traversing the canal of the cervix, and it may require, in such a case, the exercise of some skill and a little gentle manipulation in order to pass it into the interior of the uterus at all. Besides, after the sound has been fully introduced, you can often feel with it the projecting body; while in the case of the hypertrophied organ the sound passes freely and unobstructedly round in all directions. If, with the sound thus introduced into its interior, you raise the uterus towards the hand placed over the abdomen, you will be able to make out more distinctly and definitely than ever the real nature of the case. There is one difficulty in connexion with the rise of the sound in such cases, of which I ought, perhaps, to warn you, and it is this: The great weight of the fundus of the uterus, sometimes aided by inflammatory adhesions, gives a strong tendency to various displacements of the organ, and more particularly to retroflexion of it. Such a complication you must, accordingly, be prepared to expect; and in passing the sound, you must then remember to turn it with the point and concavity looking backwards towards the sacral promontory. It was not long after I had begun to make use of the sound in the diagnosis of uterine diseases and disorders, that I first fell in with and recognised a case of sub-involution of the uterus. The patient, whom I saw in consultation along with the late Dr. Abercrombie, was the wife of a Medical gentleman, and there was much perplexity as to the nature of her disease. There was a large, rounded tumour lying over into the right iliac region, which was thought to be possibly either an inflamed ovarian tumour, or an abscess, as there was considerable pain on pressure. On passing a sound, however, it was found to run right up at once about four inches into the very centre and top of the tumour. The supposed tumour was thus shown to be neither more nor less than the uterus considerably enlarged and turned somewhat to one side, as sometimes happens in such cases.
That was the first occasion, so far as I know, in which this kind of uterine hypertrophy was clearly made out; but since then, I have seen it very frequently, usually as a result of inflammation after delivery, but sometimes associated with repeated miscarriages in the relation both of cause and effect.

**Its Duration and Degree.**

In some cases you will detect the form of uterine hypertrophy which I am describing, within two or three weeks, or two or three months after delivery. These may be called the acute, or sub-acute, types of the disease. But oftener perhaps in practice, you will not be applied to till the disease is chronic—till many months, or even years, have elapsed since the date of the last delivery, or of the last abortion, which left the uterus in the sub-involved or unreduced condition which we are considering. The degree or amount of remaining enlargement varies infinitely in different cases; and is, perhaps, mainly regulated by the date of the confinement at which the arrest of the involution takes place, and the completeness or not of that arrestment. I have seen instances where the uterus was large enough to be felt some inches above the pubis, and where the uterine sound passed into the uterine cavity to the extent of four or five inches. In other examples you will find the uterus in form and length remaining hypertrophied only to a slight extent, and the sound passing perhaps not more than two and three-fourths of an inch or three inches. Between these two extremes, you will meet in practice with all intermediate degrees of this permanence of the puerperal hypertrophy of the uterus.

**Treatment of the Disease.**

In the more acute forms of the disease, I have almost invariably found that by the immediate employment of local antiphlogistics the symptoms were speedily and successfully alleviated, and the process of absorption was set up. Where any traces of inflammation still remain, the importance of this indication is at once apparent, and its fulfilment is in most cases attended with rapid relief. But even in cases where all inflammatory action seems to have died out, and only its results remain, we often find—I cannot well tell you how—that a local antiphlogistic course of treatment
has the effect of setting up absorption in the enlarged organ, and leading ultimately to its restoration to its normal state. In following out this line of treatment, then, you will do well—if the patient is not very weak and debilitated—to begin with the application of eight or a dozen leeches to the vaginal portion of the uterus, or simply to the perinaeum, or circle of the anus. I need hardly repeat, that the abstraction of a small quantity of blood in this way will be more particularly called for, and more especially beneficial in those cases where there lingers any degree of congestion or of inflammatory action in the uterus. But even in such acute or subacute cases, and in all the more chronic forms, your chief reliance must be placed on the use of counter-irritants applied externally to the surface of the abdomen or sacrum. You may use antimonial or croton ointments, or paint the hypogastric surface twice a day with strong tincture of iodine till the skin becomes tender; but the vesicant which I have found to be most efficacious in exciting the function of absorption in the womb that is now in abeyance, is the ordinary cantharides-blister, especially in the chronic forms of the disease, and when the bladder is not liable to be irritated. You may order a series of small blistering-plasters to be applied for a time over the lower part of the abdomen, or you may paint a succession of small spots—one every second or third day, with blistering liquid until the uterus begins distinctly to diminish in size. I think you will find the latter mode of applying the vesicant to be the simplest and the most certain. The plan I usually follow is to apply the fluid to a patch of about the size of a crown, and then gradually to surround this patch with a number of others of like diameter, one being added every third or fourth day, until the original central point has been surrounded by a ring of five or six distinct blistered spots. At the same time that you are thus trying to excite absorption by the application of counter-irritants to the cutaneous surface, you must endeavour to promote this object by keeping the vaginal portion of the cervix uteri immersed constantly in ointments of mercury or iodide of lead, or bromide of potassium, or other remedies likely to have the effect of stimulating the absorptive process. This you can do by introducing, or making the patient herself introduce, into the vagina one or two pessaries medicated with these substances every night and morning.

But you will find that these local measures are not
always, or in most cases, sufficient to effect a cure. You will be obliged to have recourse also to the internal administration of some of the class of deobstruent remedies; and, of these, the most efficacious are the iodide and bromide of potassium. I used, at one time, to rely chiefly on the administration of the iodide of potassium. But of late I have employed the bromide much more extensively, for it has this advantage over the former salt, that its use may be kept up for almost any length of time by a patient without her becoming subject to the kind of marasmus which we sometimes find attendant on the prolonged use of the iodide. The bromide of potassium may not only be given with safety for a lengthened period, but it may be administered with confidence as a good tonic, as well as perhaps the best deobstruent in the Pharmacopoeia. It may be depended upon as an active stimulant to absorption, besides possessing the property, beyond all other remedies that I know of, of acting as a special sedative on the reproductive organs. In cases of this kind you must administer it in larger doses than usual, making the patient take six, eight or ten grains of it three times a day. Sometimes patients suffering from this form of uterine hypertrophy present themselves to you in a debilitated and anaemic condition. Under such circumstances, you need not hesitate to add iron, manganese or some form of metallic tonic, alone or in combination, to the more specific remedies, and endeavour, always in the more chronic cases of the disease, by means of good diet and other hygienic means, to raise the patient's general standard of health.

You will occasionally meet with cases of this disease so obstinate, that the process of absorption does not begin, or does not go on to any satisfactory degree, even after you have had recourse to repeated leechings, and have kept the uterus imbedded for a length of time in discutient ointments, and have duly administered all kinds of deobstruents and tonics. In such cases you may follow up the course of treatment which I have sketched for a very lengthened period without producing any appreciable change in the size of the womb, or any marked alleviation of the patient's symptoms. If, however, by any means you can induce the uterus for a time so to take on an action of increased growth, you may confidently hope, that this temporary hypertrophy will be followed by a process of absorption which will go on perhaps uninterruptedly, until the organ
is reduced to its normal dimensions. Such a transient increase in the size of the uterus you may at any time produce by taking advantage of the physiological tendency of this organ to enlarge and become developed around any foreign body that happens to be lodged within it. You know that the uterus begins to enlarge when stimulated by the presence of an ovum, or of a morbid tumour, or of a clot of blood in its interior; and in like manner it becomes developed in size when a foreign body, such as a sponge-tent or an intra-uterine bougie, is introduced artificially. By introducing, then, a succession of very small sponge-tents into the interior of the womb, or by making the patient wear for a time an intra-uterine pessary, you can cause the uterus to take on this hypertrophic action; and by afterwards actively and fully taking advantage of the tendency of the organ to undergo a process of degeneration and diminution on the removal of the stimulus, you may succeed, by the due employment of the various discutients and deobstructs I have already mentioned—as rest, counter-irritation, and bromine—in promoting the process of absorption to such a degree that the uterus at last becomes reduced to the natural standard. In some obstinate instances I have been obliged to repeat from time to time this process of artificial irritation and dilatation before a perfect cure was perfected.—Med. Times & Gazette.

On the Means for Preventing Caries of the Petrous Bone and the Formation of Abscess in the Brain in Cases of Disease within the Ear. By Joseph Toynbee, F. R. S. Annual Surgeon to St. Mary's Hospital, to the Asylum for the Deaf and Dumb, etc.

I may, perhaps, be permitted to add a few remarks to the highly interesting observations published in your Journal of February 23, on Abscess in the Brain, associated with discharge from the ear. In order that we may ascertain the causes which lead various affections of the ear to produce disease in the brain, it is desirable that the ear be always carefully dissected, so that the nature of the affection, its exact locality,
On Diseases within the Ear.

and its relations to the petrous bone and surrounding structures, be clearly pointed out. Your reporter states that it “it is a very tedious process to take out the temporal bone for careful examination;” inasmuch as a section with a saw in front of the petrous bone as far as the body of the sphenoid, and one behind, as far as the basilar process, followed by the division of the soft parts by a large scalpel, is all that is required to remove the parts necessary for an examination of the ear, the process of removal can scarcely be considered “tedious.” The subsequent dissection of the ear doubtless requires some care; it can be best effected by means of a small pair of cutting forceps, whereby piece by piece of the petrous bone is cut away, and no saw-dust produced, with which the state of the parts is apt to be marked when the saw is used. I have no hesitation in saying that the breaking up of a petrous bone by the aid of a chisel and hammer, can lead to no useful results; indeed, the bone must be taken away in order that a careful and searching dissection may be made. Some recent observations on the mode in which mollusceous tumours developed in the external meatus, progress inwards through the petrous bone to the brain and its membranes, tend to confirm the opinion I have advanced on several previous occasions, that in all cases of diseased petrous bone and brain, the nature of the disease, the particular part of the ear affected, and its relations to the brain and its membranes, must be ascertained. Of course it is desirable that the blood-vessels and other parts adjacent to the petrous bone be also examined. Before taking leave of this part of the subject, I may add, that if any Medical man, who is too much occupied to conduct a careful dissection of a diseased petrous bone that may fall under his notice, will send it to me, I shall be happy to make a dissection, and will return the specimen, with notes.

The recent occurrence of a case in private, and one in Hospital practice, in which the brain suffered from disease of the ear, induces me to make some observations on the treatment of similar cases. There can be no doubt that the usual cause of the disease in the ear advancing to the brain is, that matter is pent up in one of the cavities of the ear. I have ventured to suggest that when pent up in the tympanum it affects the cerebrum; when pent up in the mastoid cells it affects the cerebellum; and when in the vestibule it affects the pons varolii, and base of the brain.
Since I promulgated this opinion, some years since, in a paper in the Medico Chirurgical Transactions, I have had no reason to alter my opinion. If it be a correct view—that matter, pent up in a cavity of the ear, is the usual cause of disease of the petrous bone and brain, it follows that the duty of the Surgeon is to prevent the matter from collecting; or to remove it when collected, and if neither measure can be effected, to diminish by every possible means the effect of the matter, and to prevent the progress of the disease towards the brain. The most simple and most manageable cases are those in which the tympanum is the seat of the disease, and where the whole, or a considerable portion of the membrana tympani has been destroyed; the use of a syringe and warm water twice daily, is then usually sufficient to ensure the removal of the discharge; but it must be laid down as a rule that so long as there is any discharge from an ear, so long must the syringe be used, inasmuch as discharge is apt to become more or less solid, and thus act as a barrier to its own escape, and to that secreted around it. While the discharge is being removed, of course the thickened state of the tympanic mucous membrane, which gives rise to the discharge, is to be treated locally and generally, so that, its condition being ameliorated, it may no longer pour out the unnatural discharge, and thus all fear of disease in the petrous bone may be removed. I have met with several cases in which death occurred from diseased brain where there was no other impediment to the free escape of discharge than the inspissated secretion itself, and where the free use of the syringe would have averted the mischief to the bone and the brain. In cases where the orifice in the membrana tympani is small, and where, in consequence, the discharge is apt to be detained by the remaining portion of the membrane, acting as a barrier, additional care is required by directing the stream of water through the orifice of the membrane into the tympanum, in order to evacuate the latter cavity of its contents.

The last and most serious consideration is how to avert mischief to the bone where there is evidence that matter is confined in the tympanum or mastoid cells without any outlet. The two classes of cases may be placed together, inasmuch as when there is long-standing irritation of the tympanic mucous membrane, an operation on the drum in order to establish a permanent orifice in it, must not be attempted, as inflammation of the dura mater may be in-
duced. If the membrana tympani be absent and matter is confined in the mastoid cells, it is desirable by means of a curved probe to endeavour to make an exit for the matter through the natural channel into the tympanum, and to use the syringe with warm water cautiously; by this means it is possible in some cases where the mucous membrane of the tympanum is not very thick, to secure the withdrawal of the matter from the mastoid cells; but, unfortunately, the general rule is, that the matter cannot be reached and released by the above means, for it is held in bony cells, where communication with the tympanum has been cut off by the thickening of the mucous membrane lining those cells. Supposing, then, that there is matter in the tympanum or mastoid cells which is causing irritation of the bone, and implicating the brain or its membranes, and that the performance of an operation for giving an outlet for the matter is not to be attempted, what treatment can be adopted with a hope of benefit? My own experience points to an issue or a seton as a remedy calculated to be of the highest service. One patient whose case is cited at length in my work "On the Diseases of the Ear," whom I saw some years since in consultation with Professor Miller, of Edinburgh, who had unmistakeable symptoms of matter in the mastoid cells, attended by attacks of giddiness, insensibility, and intense pain in the head, was perfectly eured by the use of a seton, when all other remedies had been tried. In what way the seton acts I cannot indicate, but I have seen several cases, and one very recently, of excessive severity, in consultation with Mr. Holman, of America-square, where the formation of an abscess outside the ear, there being no orifice in the bone and no dead bone detectable, gave relief to the most urgent symptoms produced by the presence of matter within the mastoid cells. Two other cases of the same character are now under treatment. The insidious progress of cases, in which matter in the cavities of the ear injures the petrous bone and the brain, cannot be too often or too forcibly impressed upon the minds of the Profession. Medical officers to Insurance Companies seem to be aware of the danger liable to follow long-continued discharge from the ear, but judging from cases constantly brought before my notice, as a rule, these cases are too apt to be disregarded, until fatal symptoms supervene. The recent death of a young officer, who distinguished himself in the Crimean war and Indian mutiny,
On Diseases within the Ear. [December,

may be cited in illustration of my observations on this sub-
ject. I will give a brief outline in the case:

Captain R. B., aged 25, was brought to me by Mr. Teevan on January 2, of the present year. He stated that when a child he suffered from some infantile disease, which was followed by discharge from the left ear. This discharge continued, with slight intermissions until I saw him, and it was accompanied by pain in and around the ear. Irrita-
tion within the ear, as is not uncommon, produced a polypus in the external meatus; on account of this po-
lypus Surgeons were consulted, and the growth was re-

moved on one or two occasions. The irritation, however, increased, and while at Aldershott, at the end of the year 1860, it became so severe as to induce him to come to Lon-
don to seek further advice. At the first visit, although the patient walked into my room, and did not feel himself seriously ill, I felt convinced that the petrous bone was diseased, and that there was disease in the cerebrum. There was a polypus in the meatus; the bone was tender all around the ear; there was great pain in the ear, which extended deeply towards the brain. I expressed my fears to Mr. Teevan of the very dangerous character of the dis-

case, and stated my belief that there was an abscess in the cerebrum. In spite of all treatment, the head symptoms increased; the portio dura became paralysed, and the pa-
tient also lost the power of articulation, although he was perfectly sensible. Dr. Watson, at a consultation a few days before the patient's death, confirmed my opinion of the probable existence of an abscess in the brain, but as the friends objected to a post-mortem examination, the verifica-
tion of the opinion could not be made. At least there can be no doubt, and there was no doubt in the minds of his Medical attendants, that the patient died from injury to the brain produced by long-standing disease in the ear; and to me it is highly probable that if, in early life, the disease in the ear had been perseveringly combated, its fatal results might have been averted.—Medical Times & Gazette.
Five Cases of Perineal Operations on the Urethra. (Cases under the care of Mr. Bryant.)

The five following cases illustrate some interesting points in the management of urethral obstructions from different causes. In the first two the cause of obstruction was laceration from recent injury.

Case 1.—Contusion of the Perineum—Hemorrhage from the Urethra—Subsequent Extravasation of Urine—Catheterism Impossible—Perineal Incision—Recovery.

A man, aged 53, was admitted on September 5, 1861, for extravasation of urine. The history obtained was, that five days before he fell astride on a log of wood, some hemorrhage from the urethra was the immediate result, and difficulty in micturition. The day following a catheter was passed and left in for twenty-four hours; it was then withdrawn; retention of urine followed, and as this persisted for two days he applied to Guy's. On admission the perineum was infiltrated with urine. Catheterism was impossible. Many fruitless attempts had been made to pass an instrument, before he was brought to the Hospital, and profuse hemorrhage had resulted. Mr. Bryant therefore determined to open the urethra through the perineum. He introduced his finger into the rectum as far as the prostate, and then pushed a bistoury into the perineum in the middle line and cut upwards and succeeded in slitting the urethra. He then passed a grooved director into the bladder, and was able, after passing the catheter down the penis into the wound, to guide the instrument into the bladder. On the sixteenth day urine passed through the urethra, the wound healed kindly, and the man was discharged well on September 30.

Case 2.—Fracture of the Pelvis and Laceration of the Urethra—Catheterism Impracticable—Perineal Incision—Death in Collapse from other Injuries.

In the preceding case, as we have seen, the operation was performed the day after the accident, and when extravasation of urine had already taken place. In the following, Mr. Bryant preferred to anticipate the extravasation, and as no catheter could be introduced, he at once proceeded to operate.
A man, aged 50, was admitted for fracture of the pelvis and laceration of the urethra. A cask had fallen on his hip whilst he was laid on one side. He had, luckily, made water about half an hour before. When admitted, there were evident symptoms of fracture of the pelvis, and ruptured urethra, blood flowing from the passage. There was no extravasation. It was impossible to pass a catheter, and therefore Mr. Bryant opened the urethra from the perineum, cutting down on a grooved staff. The man never rallied, however, from the injuries sustained, and died shortly after. The perineum in this case was opened in order to prevent extravasation of urine taking place, which would necessarily have resulted on every attempt to pass water. After death the ramus of the os pubis was found fractured and the urethra lacerated.

Case 3.—Indurated Stricture of the Urethra anterior to the Scrotum—Internal Urethrotomy—Recovery.

A man, aged 23, was admitted under Mr. Bryant’s care for retention of urine. On examination it was found that he had a stricture in the urethra just at the root of the penis, and here an induration could be felt. Six months previously, he had had gonorrhoea. Mr. Bryant succeeded by force in passing a catheter, and thus relieving the retention; but as the stricture was a very tight one, and from its position was very favorable for internal section, he determined to operate on it. He, therefore, divided it internally by the urethrotome, and was then able to pass a No. 11 catheter into the bladder. It was kept in over a period of five days, after which the patient was able to pass water freely. He was kept in the Hospital a month and was then discharged cured; the local induration having disappeared.

Case 4.—Stricture and Extravasation of Urine—Free Incisions—Recovery—Subsequent Contraction of the Stricture—Perineal Section—Recovery.

Robert A., aged 43, was admitted for extravasation of urine consequent on stricture. He had had gonorrhoea twenty years before, but had, he said, never used injections. The urine was effused into the cellular tissues of the perineum, scrotum and penis, and extended into the abdominal wall. Mr. Bryant freely incised the distended
parts, and also made an incision into the urethra from the perineum. He then succeeded in passing a catheter through the opening in the perineum into the bladder. The man rapidly recovered from the extravasation, and micturition was tolerably free, but the urethra subsequently contracted considerably, the passage of a catheter being almost impossible, the whole passage being like cartilage.

On May 2, 1860, chloroform being given, Mr. Bryant performed perineal section. The case did well, and a full-sized catheter could be introduced with ease. A small fistulous opening remained, which proved obstinate. The edges were, however, kept raw by strong liquor ammonia, and a perfect cure resulted, the man making water better than he had for years.

Case 5.—Retention of Urine in a Boy—Difficult Catheterism—Abscess in the Perineum—Perineal Section—Recovery.

A boy, aged 9, of good general health, was admitted under Mr. Bryant's care for retention of urine. Before he was brought to the Hospital, many attempts had been made to pass a catheter, but in vain. With great difficulty and with some degree of force, Mr. Bryant succeeded in passing No. 1, and drew off a large quantity of urine. The difficulty experienced was in the scrotal part of the urethra. An abscess formed in the perineum, and as it was on the next trial, found impossible to pass an instrument, Mr. Bryant opened the abscess. Urine flowed from the opening, but a small quantity passed by the penis. The urine all along had been puriform. The opening in the urethra partially closed, but no improvement took place in the passing of the urine by the ordinary channel. Mr. Bryant, therefore, on March 2, performed perineal section. The grooved staff was forcibly introduced. No indurations could be felt at the site of obstruction. On March 9 urine flowed freely through the urethra, and the wound healed, a perfect cure resulting. The cause of stricture in this case was very obscure, indeed it was doubtful whether such existed, and whether the obstruction had not been some congenital malformation of the passage.—Med. Times & Gaz.
The following observations form a brief extract of some interesting papers on Pyæmia, from the pen of Professor Roser, of Marburg:

1. The Specific Nature of Pyæmia.—We are indebted to the obstetrician, rather than to the surgeon, for any progress which has been made in our knowledge of the nature of pyæmia, he having established the miasmatic character of the pyæmia of puerperal women, and its identity with the pyæmia of the wounded. The doctrine of "Surgical Fever," so ably expounded by Simpson, has however made but little way in Germany, Virchow's views on thrombosis there predominating, as the doctrine of phlebitis formerly did in France. Professor Roser shows in some detail, that neither Hunter's theory of phlebitis, Rokitansky's disease of the bloodvessels, nor Virchow's thrombosis, afford any sufficient explanation of pyæmia, conditions being assigned as causes which are mere concomitants or effects. The attempt to explain its occurrence by the fact of the absorption of ill-conditioned pus also fails; for, although various analogous circumstances are producible by such absorption these differ much from those of pyæmia, and may be expressed by the term septæmia. The two conditions, may indeed, be combined, and we may have a septic pyæmia, just as we have a septic variola or scarlatina. If pyæmia be followed out through its various modes of manifestation, it will be found to exhibit a marked similarity to typhus and other zymoses; and just as in the case of these zymoses, while sometimes it appears epidemically and as the result of contagion, at others it arises spontaneously, without the prior presence of pus. This fact has long been known in lying in hospitals, and careful observation will easily detect similar cases in surgical wards. Stromeyer has observed a whole series of such cases, and similar ones have come under the author's notice. The explanation of the occurrence of sporadic cases of pyæmia may be difficult, but it is no more so than is the explanation of sporadic typhus or cholera or other zymoses.

Forms of Pyæmia.—Professor Roser confines his attention to some of these which have excited but little attention. 1. Pyæmia Fœbricula.—Just as during the prevalence of typhus we find patients here and there exhibiting but
Blight symptoms, so in hospitals infested with pyaemia, a mild form of the disease is observable which may be termed febricula. It has been but little noted, as was indeed to be expected, by those who were on the lookout for phlebitis, sepsis, or thrombosis, as the initial phenomena of pyaemia; but the author instances cases in his own and in Stromeyer's practice. In lying-in hospitals the febricula is termed "milk fever"—a term of doubtful propriety, seeing that the affection is observed sometimes in almost all the inmates, and at others in none of them. 2. Pyemic Erysipelas.—When in a patient suffering from pyaemia, erysipelas appears, the natural conclusion is that the pyaemic blood-disease has localised itself in the skin, just as it might have done in the pleura or in a joint. When, however, in a subject of erysipelas symptoms of pyaemia appear, the question may arise whether during the erysipelas the blood poison has become developed, whether the pyaemia has become added as a second special process of disease, or whether the erysipelas itself was only the first manifestation of the pyaemic condition. Lastly, erysipelas and pyaemia may co-exist, and although they may not often be met with in the same patient they are frequently found prevailing among different patients in the same ward. The author's conclusion is, that hospital erysipelas is a consequence of pyaemic infection and its localization in the skin, although he admits that it is doubtful whether another variety of blood-poison may not also give rise to it. 3. Pyemic Diarrhoea.—This affection, well known to clinical observers, has obtained but little notice in hand-books. There are cases in which no other symptom, except the diarrhoea is present, but the author still regards these as pyaemic, occurring as they do simultaneously with other cases in which the diarrhoea has only been the first of the whole series of symptoms. When this diarrhoea is combined with the pyaemic erysipelas, the disease exhibits striking and rapid contagious properties, and in hospitals in which precautions against contagion are not taken, this hospital epidemic diarrhoea, though little spoken of, is of frequent occurrence.

Therapeutics.—Although the incurability of pyaemia is no longer believed in, practitioners in general are not aware of the number of recoveries which really do take place, and that even when excluding the slighter cases above alluded to, and admitting only examples of well-marked pyaemia. The number of recoveries has increased in proportion as
the essential conditions of fresh air and a good diet have been appreciated. Supporting the patient's strength by means of wine, has replaced the former mischievous anti-
phlogistic treatment; and, indeed, judging from the use made of alcohol in England, there is danger of the opposite extreme being fallen into. Quinine, though usually of no great utility may, in some cases, be a valuable adjuvant; and morphia is an invaluable remedy, serving not only to check diarrhoea, abate pain, and diminish danger in perito-
nitis, &c., but also to tranquilise the excited and delirious patient. The most important agent in the treatment, how-
ever, is a frequent renewal of fresh air, and the removal of all objects likely to pollute it.

Prophylactics.—Under this head the author lays great stress upon simplicity in dressing wounds, observation of the strictest cleanliness, and checking the decomposition of pus by cold and chlorine applications. When the spread of pyæmia is to be guarded against, instruments and nursing appliances should not be used in common, no autopsy should be performed by those attending on the sick, and the surgeon, visiting his cases of pyæmia last, should change and ventilate his clothes before seeing other patients. In all cases of ill-conditioned suppuration at Marburg, weak chlorined water is employed, and after waiting on such pa-
tients, the nurses carefully wash their hands in the same fluid. Finally, Dr. Roser protests against the erecting hos-
pitals with large surgical wards, unaccompanied by means for isolating the subject of pyæmia. Small hospitals of even a very faulty construction, give rise to a less mortality than some magnificent structures in which the patients are assembled together in large numbers.

Juridical Relations.—Under this head the author discusses the question that may come before the surgeon in court of law viz: whether a fatal pyæmia following an injury not in itself necessarily fatal, should be regarded as an essential condi-
tion of such injury, or as an accidental and superadded cir-
cumstance; the exact determination of this point modify-
ing in the German courts the amount of punishment to be awarded. He cites cases in which the pyæmic complication has been altogether overlooked, or has been wrongly inter-
preted to the detriment of the accused. He refers also to two other conditions to which the same considerations ap-
ply, viz: diffuse inflammation and tetanus. Diffused in-
flammation after wounds of tendons, &c., so often observed.
in hospital, and so seldom in private practice, should not be attributed to the nature of the local injury, but to the presence of miasmata. In fact it is of a pyæmic nature. With respect to tetanus, we know nothing concerning its casual connexion with wounds, and when questioned juridically, we should avow such ignorance. The author himself is disposed to regard it as a zymotic affection, not only because no casual connexion with the wound can be made out, but from its analogy to hydrophobia, which is a zymotic affection, and from its disposition to prevail as an endemic or epidemic.—Br. of For. Med. Chir. Rev.

Case of Cysticercus Cellulosac in the Anterior Chamber of the Eye. By Dr. Mende.

The wife of a shoemaker, 25 years of age, of healthy appearance, and far gone with her first child, applied to the author on account of an obscurity of vision. On inspection a cysticercus was perceived with the utmost distinctness in the anterior chamber of the right eye. The worm was of a delicate white, the bladder being so transparent that the brownish iris could be seen through it. It was of the size and shape of a small pea, and below was a process which was somewhat whiter and less transparent than the rest of the worm; and from this projected a white transparent neck, about a quarter of a line in length, having at its extremity a small round head, which examined by a lens, exhibited lateral swellings, and resembled the head of a tenia. The bladder of the worm covered the lower part of the pupil, leaving this free for two-thirds of its circumference, while in appearance it did not differ from that of the other eye. The worm was motionless, and movements were not induced when the patient moved her head, or when a strong light was directed upon the eye. At different examinations during the next three days the worm was found to have assumed different positions and various shapes. It was very interesting to observe through a lens how it thrust its head here and there, just as a leech, before it fixed on a spot to commence sucking from. When
it attached itself to the anterior of the iris, its neck was bent backwards, and the bladder almost completely obstructed the pupil—a slight quivering movement, like that seen in the sucking leech, being imparted to the tube-like process of the animal while the bladder continued motionless. Sometimes the process was distended into a bladder much smaller than the other, below which it was placed, and from which it was separated as if by a ligature. The woman was confined on the third day after being seen, and continued under observation for about three weeks before an operation was performed, the animal frequently changing its position, attaching itself to the various surrounding parts, without seeming to inflict any injury on them by its sucking process. The pupil at last became narrower than the opposite one, whilst its form was converted into an oval, and vision got more and more impaired. Fearing the production of iritis, a linear-incision was made, and the worm, discharged with the aqueous humor, was carefully captured. It was placed in tepid water, but exhibited no movement. The wound in the cornea soon healed under the employment of ice, and the eye has regained its perfect powers. The worm three months after its extraction has contracted from eight to five millimetres in length.

So far as the author is aware, there have been seven instances of cysticerci in the anterior chamber recorded. The first was discovered by Schott, of Frankfort, and Grafe, Hirschler, and Appia have each described a case, and Mackenzie relates three cases. This last writer and Grafe have also collected cases in which the cysticercus has been found in various other parts of the eye.—Grafe’s Archiv. fur Ophthalmologie, vol. vii. p. 122.

Morbus Coxarius.

The Academy of Medicine, of New-York, has devoted the general portion of several of its later sittings to the consideration of the subject of morbus coxarius. The Section on Surgery had previously discussed the subject at great length, and had recommended it to the Academy. Dr. A. C. Post opened the discussion, by giving a concise history of the pathology and treatment of hip disease. He was followed by Drs. Batchelder, Buck, Sayre, Wood, Parker, Raphael, Krakowitzer,
Bronson, and others, and by invitation, Drs. Bauer and Davis who were present, participated in the discussion. Little was said that was novel as regards the pathology of the disease, but the mechanical treatment, brought to such a degree of perfection by the surgeons of this city, was minutely explained thoroughly criticised and universally commended. The principle upon which the mechanical treatment is based is the separation of the impinging surfaces of diseased bones by means of carefully applied splints, producing extension and counter-extension, and admitting of motion of the joint. This treatment has been the gradual growth of years. As early as 1835, Dr. Harris, of Philadelphia, is said to have applied extension and counter-extension by means of Gibson's modification of Physic's long splint, with success in four cases. A report of these cases was made early in 1839, but, as Dr. March states in his paper on morbus coxarius, "without giving any explanation of the theory or principles upon which the practice is founded." Later, the treatment was proposed by Dr. March, of Albany, as an entirely new treatment. He found he had been anticipated by Dr. Harris. Dr. March however, explained in his paper just referred to, which was read before the American Medical Association, and printed in the Transactions of that body for 1853, the theory of the treatment. "The most important part of the treatment," says Dr. March, "consists in the keeping of the joint in a perfect state of repose." This is accomplished by a splint. "Extension and counter-extension are used with a view to prevent undue pressure on the delicate and tender surfaces of the diseased bones." "In the advanced stage of the disease," continues Dr. March, "the cartilages of the acetabulum and of the head of the bone are destroyed; the carious and spongy tissue is covered with coagulated lymph, and this adhering to the surface of the bones becomes highly vascular. Now if these two surfaces, thus covered with organized or organizing matter, could be kept in easy apposition and at rest—without too much pressure on the one hand, and on the other without exerting too much separating or sundoring force—in many instances a bony ankylosis would be the result."

This is the first record we have of the mechanical treatment formulated upon known pathological conditions. But Dr. March does not seem to have proposed it for other than the latter stages of the disease, for, in the early stage, he says "it will be important to resort to the use of the long splint, to maintain the joint in a state of rest, that the inflammation may subside," while extension and counter-extension, it ap-
pears, were used by him in the advanced stages to prevent the
deformity of the limb.

Next in order to Dr. March is the treatment proposed by
Dr. Bauer, of Brooklyn, by means of an apparatus similar to
the double gouttiere of Bonnet, of Lyons, having, however,
attached to it a footpiece allowing of extension. This appa-
ratus is made of wire, and has been dubbed with the sobriquet
of the “wire breeches.” This apparatus keeps the limbs immo-
vable, and permits the patient to be carried about.

In April, 1860, Dr. H. G. Davis described in this journal a
method of treating hip disease he had employed for many
years. The principle upon which his treatment was founded
was the application, by means of a corrugated steel splint, of
extension and counter-extension, permitting at the same time
the patient to take active exercise in the open air.

For the steps of the treatment and an explanation of the
splint used, we refer to Dr. Davis’ paper in the Monthly for
1860. In this instrument is combined all the suggestions
made by Drs. Harris and March, with the addition of elastic
extension applied in all stages of the disease, not for the sole
purpose of preventing or overcoming a deformity, but as a
curative means, and with that freedom of action to the patient
wearing the splint which permitted him to take exercise and
air, so important to the general health. This was attempted
to be accomplished in a measure by Bauer’s wire breeches,
but is positively accomplished by the Davis plan of treatment.
The report of the Section on Surgery, and the remarks made
by most of the surgeons who participated in the discussion at
the Academy, gave Dr. Davis the credit of having introduced
the methodical plan of treatment to the profession.

To the steel splint of Dr. Davis several modifications have
been made by Dr. Sayre, Dr. Davis himself, and others.

Dr. Sayre differs from most of the profession in his views
of the etiology of the disease. He holds that, with few ex-
ceptions, the disordered action of the joint can be traced to
direct traumatic influences, and not to a strumous origin, as is
the almost universal opinion. He believes that the effects
have been mistaken for the causes, the serofulous cachexia
being consequentively developed, and therefore being the results
and not the causes of the disease. In these views he is sus-
tained by Dr. Bauer, of Brooklyn.—Amer. Med. Monthly &
N. Y. Review.
Nitric Acid in Intermittent Fever.

As early as 1854, the anti-periodic properties of nitric acid had been presented to the profession, by Dr. George Mendenhall in the Western Lancet; and even prior to that time had been availed of by Dr. E. S. Bailey, of Indiana. A recent article in the Maryland and Virginia Medical Journal, by Professor Wm. A. Hammond, late U.S. Surgeon at Ft. Riley, Kansas, is again attracting the attention of the profession to its use for this purpose; and from it we condense the following: Forty-one cases, ten of the quotidian and thirty-one of the tertian type, form a table, the basis of a report made to the Surgeon-General. Of these, thirty-two were treated with nitric acid and nine with quinine. Three cases cured by nitric acid, had previously used quinine unsuccessfully; and two, cured by quinine, had been treated with nitric acid ineffectually, and in one other the acid was discontinued, on account of creating nausea, heart-burn, etc. The average period of treatment was the same with each remedy—three days. The acid was given in doses of ten drops, three times per day, properly diluted with water; the quinine in eight grain doses, as often. Dr. Hammond says: Besides the fact that the nitric acid was equally successful with quinine in arresting the disease, the difference in the cost of the two articles is so greatly in favor of the former substance as to render it an object of importance to make its curative properties more widely known. Since the foregoing cases were treated, I have frequently employed nitric acid in the treatment of intermittent fever, and have rarely been disappointed in my expectations of its curative action. In fact, in simple, uncomplicated intermittent, I seldom have occasion to use anything else. In cases of enlargement in the spleen, consequent upon frequent attacks of the ague, the remedy in question has, in my hands, proved very advantageous.—Chicago Medical Examiner.

Cisterns for the Preservation of Rain Water. (Academy of Sciences.)

A communication on an important question of hygiene was made by Dr. Grimaud of Caux. This learned fellow-practitioner's object is to make known the mode of construction of the cisterns in use at Venice, and of popularizing in France
this advantageous manner of collecting and preserving potable water, for the private and public requirements of a great number of places. At Venice, the greater part of the rain-water is collected in 2077 cisterns, 177 of which are public. Their united capacity averages 7,100,000 c. feet, and when all deductions are made, they supply 4½ gallons of water per day for each individual of the 120,000 inhabitants of the city. Dr. Grimaud describes in the following terms, from information afforded to him by the engineer of the city of Venice, the mode of construction of these cisterns: The ground is excavated to about nine feet three-quarters; a depth which the infiltrations of the lagoons do not allow to exceed. The well receives the form of the inverted frustum of a pyramid. The surrounding earth is supported by a solid wood-work of oak or larch, bearing on the truncated summit and likewise on the four sides of the pyramid. On the wood-work is placed a layer of compact and consistent pure clay, the surface of which is most carefully smoothed down. The thickness of this layer is proportionate to the dimensions of the cistern, and in the largest is not more than twelve inches, a depth sufficient to resist the pressure of the water, and also to oppose an invincible obstacle to the roots of vegetables which may grow in the surrounding soil. It is considered most important not to leave any cavities in which air may remain. At the bottom of the excavation, in the interior of the truncated summit of the pyramid, is placed a circular stone, hollowed in the middle like the bottom of a kettle, and on this stone is raised a hollow cylinder of the diameter of an ordinary well, constructed with dry bricks laid well together, those at the bottom only being perforated with conic holes. This cylinder is raised above the level of the ground, where it is finished off like the kirb of a well. Thus a considerable vacant space is left between the cylinder, rising from the middle of the pyramidal excavation and the walls of the pyramid, lined with clay and resting on the wood-work. This space is filled with well-washed sea-sand. Before the whole is covered in with paving stones, a sort of stone box closed by a stone lid and perforated with holes, is constructed at each of the four corners of the base of the pyramid. These boxes, called cassettoni, are connected with each other by a small pipe, made of dry bricks, resting on sand. The whole is covered over with common paving-stone, inclined in the direction of the four orifices of the cassettoni at the corners. The water from the roofs runs into the cassettoni, penetrates into the sand through the joints of the bricks of the small pipes, and
collects, taking its level at the centre of the hollow cylinder, in which it enters by the small conical apertures at the bottom. A cistern thus constructed, and kept in good repair, supplies very clear water, and preserves it perfectly to the last drop. Now, wherever there is a roof, there is a means of collecting rain-water; sand, stone, clay, bricks, are everywhere met with. But the clay must be of good consistency, the sand pure and well-washed; if it contained earth it would vitiate the water by the addition of fermentable principles; the sand must, in addition, be insulated by clay from the surrounding ground. These conditions are easily satisfied, and when we turn our thoughts to a number of places in which water is expensive and the supply insufficient, it will be readily understood that Venetian cisterns would be so many benefactions.—Dublin Medical Press.

Prolapsus of the Rectum.

M. Coulon, house surgeon to the Hopital Sainte-Eugenie, describes as follows the treatment employed by M. Marjolin for prolapsus of the rectum in children: The first thing to be done is to reduce the tumour. The subsequent treatment employed at the Hopital Sainte-Eugenie by M. Marjolin consists:

1. In the removal of the cause of the procidence; 2, in the general improvement of the system; 3, in the restoration of the sphincter and levator ani muscles to their normal tone.—1. For the purpose of contending with the causes, M. Marjolin checks diarrhoea with preparations of rhatany, tris-nitrate of bismuth, laudanumised enemas, and proscribes every kind of fruit and vegetable. He relieves constipation by mild aperients. 2. To invigorate the system he resorts to the tonics in general use: claret, bark-wine, syrup of iodide of iron, extract of cinchona, generous diet, cold shower-baths twice a day, gymnastics, open-air exercise, &c. 3. To restore the tone to the tissues of the region, he recommends cold tonic and astringent lotions frequently applied to the perineum, either with pure water or with a solution of rhatany; and in addition to modify the mucous membrane, injections of alum (2½ dr. to 1 lb. water) or of rhatany twice a day with a small glass syringe. When the bowels are moved, care must be taken that the efforts be not long continued; the night-stool
Uremia from Retention of Urine.

Some time since M. Aran was suddenly summoned at three o'clock in the morning to attend a child who the previous evening had suddenly been seized with trismus and slight spasmodic action of the muscles of the back. The patient was a vigorous infant eight days old, hitherto free from ana-sarea or convulsions, had taken the breast with perfect ease, and its functions appeared in every respect regular. When first he saw the child, M. Aran discovered no other symptoms but the muscular rigidity alluded to; violent tonic contractions, however, soon set in, at intervals of thirty or sixty minutes and this condition persisted, without any abatement, for thirty-six hours, when the struggle ended in death. The central organs of the nervous system presented no peculiarities beyond enormous vascular congestion of the rachidian venous network, and of the skull, more especially the parietal bones. No marked morbid change was detected in the thoracic viscé-ra or the liver and spleen. Important alterations existed, however, and further dissection supplied the explanation of a problem which the most careful examination had at first left unsolved. The bladder considering the age of the infant was enormously distended with urine, and filled the hypogastric region up to the umbilicus. The ureters were also the seat of extraordinary enlargement, and they formed under the peritoneum, two cylinders of the diameter of thick pencils, opening at their junction with the renal calyces into large funnel shaped expansions. The urine was perfectly transparent, but when heated and acidulated with nitric acid, deposited a copious amount of albumen; the kidneys were extensively diseased. The right kidney was in the state of hypertrophy and
yellow degeneracy which belongs to the third or fourth stage of Bright's disease; the tubuli uriniferi were obstructed at their junction with the sinus renalis by crystals of lithate of soda. The parenchyma of the viscus was destroyed on the left side and the gland was converted into a collection of small cysts formed by the dilated infundibula. The secreting part of the texture was entirely disorganised.

The cause of death was, therefore, hydronephrosis—a disease improperly described as albuminuria, and life had been destroyed by nervous disturbances, which of late have been considered as resulting from the presence of urea in the blood; uremia in this instance had originated in retention of urine caused by the excessive narrowness of the prepuce. M. Aran was confirmed in this view by the fact that even energetic pressure of the bladder was inadequate to force its contents through the urethra. The presence of urea in the blood which occasioned death in the present instance, is not uncommon, and induces very different morbid phenomena. When the disease assumes a rapid and acute form, convulsions more usually chronic may appear; sometimes, on the contrary, the spasms are permanent, as in the child whose history we have related; in other cases, coma or delirium, with or without convulsive action is observed. In the chronic variety, the symptoms are much less marked. The patients complain of a sense of discomfort, of agitation, of more or less headache, and disturbances of the intellect, of memory, or of the senses, &c. are likewise observed.

How are the convulsions, coma, delirium, and the various pathological conditions above enumerated to be connected with uremia? The pathologist will be enabled to reply to this question by the estimation of the precedents of the case, by the chemical examination of the urine, and more especially by the specific gravity of this secretion. It should be observed that the nerve manifestations, referrible to the presence of urea in the blood, are not merely coincident with albuminous urine, but are also observable in cases of complete destruction of the renal texture, when the excreted fluid contains neither albumen, urea, nor saline ingredients, but consists of almost pure water. The specific weight of the liquid is then very low, and this indication should on no account be neglected more especially when percussion shows the dulness in the region of the kidney to have much increased in extent.—Jour. de Médecine et Chir. Pratique.
MEDICAL COLLEGE OF GEORGIA.

The absence of a large portion of the Faculty of this Institution, engaged in the service of the country, has rendered it impossible to open the College this season, and its closed doors indicate the determination which pervades all classes of the Southern community, to sacrifice every interest rather than submit to the iniquitous domination of our fiendish foes. No age nor condition has escaped the enthusiasm created by the war-cry. The robes of the divine, the magisterial ermine, and the professorial cap are alike laid aside, to make way for the armor of deadly strife; and beardless boys, panting for blood, hasten to the rescue, while their mothers and sisters prepare materials to dress their wounds. Such is the condition of our people from the mountain-tops to the very sea-beach. No apology is therefore necessary for those who have left their chairs vacant in our halls of learning; but we may indulge the hope that they will soon accomplish their patriotic mission, and return with laurels upon their brows, to resume their accustomed labors.

Professors Ford and Campbell are at the Georgia Hospitals in Richmond; Prof. Miller with the army at Manassas; Prof. Jones in the service on the coast of Georgia; and Dr. D. Ford at the Culpepper Hospital, Va. The remaining Professors may be called into the field at any moment.

SUSPENSION OF THIS JOURNAL.

It is with much regret that we find ourselves obliged to announce the suspension of this Journal for the present, and probably during the war. The high price of paper, the increasing difficulty of getting it at any price, and the probability that the supply will soon fail entirely, have combined to compel our worthy publisher to decline a renewal of his contract with us. We must, therefore, yield to the stern necessities of the times and take an affectionate leave of our numerous readers. When we shall have achieved our independence, the Southern Medical & Surgical Journal will again, with recuperated energy, resume its scientific mission. We doubt not that it will then command, as it has done for a quarter of a century, a liberal patronage throughout the Confederate States.