Aneurism of the Ischiatic Artery—Ligature of this Vessel, and subsequently of the Primitive Iliac Artery; with remarks, by L. A. Dugas, M. D., Professor of Surgery in the Medical College of Georgia. (Read before the Medical Society of the State of Georgia, at its meeting in April, and ordered to be printed.)

Aneurismal affections of the breech or gluteal region are so rare, and their consequences so serious, that it becomes a duty to place upon record such cases as we may see, together with the result of the plan of treatment adopted, whether favorable or otherwise. Were failures in the management of surgical or other diseases, as freely published as successes, our means for estimating the relative merit of different procedures, would be greatly improved.

Although the branches of the internal iliac artery which pass out of the pelvis, may become aneurismal without having suffered any traumatic lesion, such cases are rather exceptional, and the aneurism may in general be traced to some mechanical injury. Of the small number of aneurisms of this region referred to in systematic works, the majority implicate the gluteal artery; so that there are very few well defined instances of aneurism of the ischiatic artery. Professor Bouisson, of Mont-
pelier, is the first who has dwelt at any length upon these affections, and his memoir published in the Gazette Médicale de Paris, for March, 1845, contains a better account of them than can be found elsewhere. An abstract of this interesting contribution, is contained in the first volume of Vidal's "Pathologie Externe," and has also been incorporated in the American translation of Velpeau's Operative Surgery.

The symptomatology of these aneurisms does not differ materially from that of similar affections in other parts of the body, and their diagnosis, although sometimes obscure, may usually be made out with sufficient accuracy by careful examination. Yet it is alleged, that "an eminent surgeon of London, Mr. Guthrie, tied the primitive ilia in a patient who was supposed to have gluteal aneurism; but in whom death, which took place eight months after, disclosed the fact, that it was an encephaloid tumor." It is also stated, that a Parisian surgeon of large experience, mistook an aneurism of this kind for an abscess, and punctured it. But it is much less difficult to diagnosticate the mere existence of an aneurism of this region, than to determine positively whether it be located in the gluteal or in the ischiatic artery.

In a chapter upon Aneurisms, inserted by Dr. Mott, in the translation of Velpeau's Surgery, he says: "when an aneurism exists in the gluteal region, we believe it utterly impossible for any surgeon to say whether the disease is seated in the gluteal or ischiatic artery. These arteries emerge from the pelvis so near together, that, a priori, the identification of an aneurism in one or the other is totally impossible." (Op. cit. vol. 2, p 298, 1st ed.) The cases of which I am about to give an account, establish conclusively that our distinguished countryman has been rather hasty in the expression of his views so dogmatically. In these cases, I think it will be conceded that there could have been no doubt as to which artery was the seat of disease, even before its ligation made the demonstration complete.

Several methods of treatment have been proposed and practised, in the treatment of aneurisms of the gluteal region. In recent wounds opening the gluteal or ischiatic arteries, there can be no doubt as to the propriety of acting upon the general
principles which govern us with regard to wounds of arteries in other localities; that is to say, of cutting down to the vessel and placing ligatures above and below the point injured. This is advised even by the authority just quoted, notwithstanding his manifest aversion to the ligature of these vessels under any other circumstances.

In cases of a different character, other means have been used. Systematic compression has failed to give more than temporary relief, and surgeons are divided as to the point at which the ligature should be placed within the pelvis; some advocating its application to the internal iliac, and others preferring to take up the common or primitive trunk. Bouisson urges the ligation of the ischiatic vessel at its emergence from the pelvis, as more easily performed and less dangerous. Whether this will be found more effectual, remains to be seen. It is unquestionably easier to place a ligature upon the ischiatic artery outside of the pelvis, than upon the internal iliac; but by so doing, we operate nearer the seat of disease, where the coats of the artery are more apt to be in a pathological condition, and are consequently more liable to be attended with secondary hemorrhage. On the other hand, the internal iliac is very difficult to reach, and its numerous branches are apt to prevent its occlusion for a sufficient length to obviate the dangers of secondary hemorrhage. Again, when we reflect upon the free anastomoses of the branches of the internal iliac with vessels derived from the external iliac, or rather from the crural artery, we are led to doubt the efficacy of ligatures placed upon any portion of the internal iliac, or of its subdivisions. It would seem that the only hope for success must be found in the possibility that by retarding the force of the circulation in the aneurism, coagulation may be induced within it. I must confess that such were my expectations when I performed the operation I am about to relate. Of the seven cases recorded in which the internal iliac was tied for aneurisms of the breech, four terminated favorably and three fatally. (Mott's Velpeau.)

As Prof. Bouisson's method of reaching the gluteal and the ischiatic arteries, for the purpose of ligating them, appears to be the best, I may be permitted here to translate it, from his essay.
"The surgeon should recollect that the gluteal artery emerges from the pelvis, at the highest point of the sciatic notch, eleven centimetres from the anterior superior spinous process of the ilium, six centimetres from the posterior superior spinous process of the ilium, and ten centimetres from the most elevated point of the crest of the ilium. Having made the patient lie with his back up, and ascertained by an examination of these points, the precise seat of the gluteal artery, the surgeon should make a transverse incision six or seven centimetres in length, the middle of which should correspond with the point of emergence of the vessel. This incision is carried through the skin, cellular tissue and gluteus maximus, and exposes the aponeurosis in a line tangent with the curve of the sciatic notch. The sides of the wound will immediately retract, and the aponeurosis may then be cut upon a grooved director carried between it and the artery, which may be felt pulsating beneath the edge of the sciatic notch.

"With a grooved director moderately bent, and having an eye near the end with a ligature passed through it, he should carefully isolate the bundle of vessels from the cellular tissue, in which they are imbedded, push aside the vein or veins as the case may require, as well as the nerve on the inner margin, and hook up the artery just below the bony edge of the sciatic notch. It is important to carry the end of the director deeply enough to be sure of elevating the arterial trunk itself, otherwise a mere branch of the vessel might be mistaken for it. These steps in the operation are materially facilitated by the natural retraction and separation of the sides of the wound, as well as by the direction of the incision. The threaded director may readily be carried without difficulty in this transverse wound; whereas, when it is made parallel with the fibres of the gluteus maximus, as advised by H. Harrison, it is not without some trouble that the artery can be elevated by the grooved director, or by Deschamp's needle.

"The remainder of the operation presents nothing peculiar; the vessel is tied in the usual way; and union by the first or by the second intention will be sought according to circumstances.

"Ligature of the Ischiatic Artery.—We know of no instance in
which this artery has been ligated in the living, although cases have occurred which might have rendered this necessary, as hemorrhages and aneurisms. The possibility of ligating this vessel is admitted, and it is acknowledged to be less difficult than a similar operation upon the gluteal artery.

"We have repeatedly tied the ischiatic artery without difficulty in the dead subject by means of a transverse incision as in the preceding case. The ischiatic artery emerges from beneath the pyriform muscle, exactly at the centre of a line drawn from the posterior superior spinous process of the ilium to the tuberosity of the ischium. A transverse incision of six centimetres in length, should pass over the point just indicated, and penetrate through the skin, cellular tissue and gluteus maximus. The artery is found on the inside of the sciatic nerve, with the vein on its posterior and internal aspect. The vessel is to be isolated and elevated with a threaded grooved director, care being taken to avoid including the vein in the ligature, and the operation is to be completed as in ordinary cases.

"A similar incision would answer for tying the internal pudic which lies a few millimetres from the inner side of the ischiatic."—(Gazette Médicale de Paris, March, 1845, p. 200.)

I will now present the history of a case which came under my charge in 1857, as taken from my note-book.

Wesley M. Johnson, of Gilmer Co., Georgia, aged twenty-four years, directed to me by my friends Drs. Setze and Connel, of Marietta, placed himself under my care in March, 1857. He states that when four years old, he fell from a tree and struck with his seat upon a rocky surface; but has no recollection of any contusion or injury to the part at that time. He was told that he was so badly stunned, that he was carried home insensible. About five years after this, he first felt a little tumor in the region of the tuberosity of the ischium, which has been steadily increasing ever since. He does not know when it began to pulsate, but thinks it has done so for several years. About a year ago a "Cancer Doctor" said, "he could cure him with plasters that would eat out the tumor." A plaster was accordingly applied, which gave him such intense pain, and caused so much inflammation and tumefaction, that he refused to have it repeated.
His condition when I examined him was noted as follows: [see Fig. 1.] General health apparently very good; has a tumor as large as a goose's egg upon the inner cheek of the nates, near the tuberosity of the ischium, and extending upward and inward in the direction of the well known course of the ischiatic artery. It is easy to grasp the whole tumor in the hand, and no distinct neck can be felt extending up beneath the gluteus maximus.

Its lower extremity protrudes about two inches beyond the general surface, is somewhat conical, soft to the touch, and feels as though there was no more than the thickness of the skin between its contents and the finger. The skin is also here of a red or dark hue, not unlike that presented by an acute abscess on the point of bursting. The tumor evidently contains a fluid which may be forced out of it by pressure, and which returns immediately when this is discontinued, the current of egress and of ingress being distinctly felt by the finger. The tumor pulsates visibly to the eye and sensibly to the hand; a distinct aneurismal thrill or whiz, with beats synchronous with the action of the heart, may be easily detected with the naked ear or with the stethoscope over the entire tumor, and along the course of the
ischiatic artery up to the sciatic notch, where it is most audible. Firm pressure upon the seat of the ischiatic artery at its exit from the pelvis, arrests both the pulsation and the whiz, and these return when the pressure is omitted.

The tumor never gives him any pain, except when he rides on horse-back, or sits long upon it. It then feels heavy and sore. It is evidently an aneurism of the ischiatic artery, probably induced by the traumatic cause above mentioned.

The following operation [see Fig. 2] was performed on Monday, the 16th of March, in presence of a number of physicians and students: concentrated chloric ether was inhaled to intoxication, but not to coma; an incision five inches long was made in the middle of a line drawn from the posterior superior spinous process of the ilium, to the tuberosity of the ischium, and carried through the gluteus maximus which was unusually thick; ligated one small artery; exposed the inferior margin of the pyriformis, and found the ischiatic artery beating strongly and with a distinct thrill to the finger. When this was compressed, the pulsation in the tumor ceased, but would return upon removing the pressure. The vessel was now ligated with silk
and the tumor ceased to pulsate and became pale and flabby. The edges of the wound were brought together with quill sutures, and a firm compressing bandage applied to the tumor. Two hours after the operation, a freezing mixture of ice and salt was applied for ten minutes to the tumor, over the bandage, and 40 drops tr. opii. administered.

17th March. Passed a bad night in consequence of febrile excitement and confined position; is still feverish and feels “sore all over;” no pulsation nor whiz in the tumor. Re-applied freezing mixture to tumor.

18th. More comfortable; no febrile excitement.

19th. Very comfortable; no pain; no pulsation in the tumor; removed the bandages and found that the tumor resumed partially its former fullness, but no pulse nor thrill detected by applying the ear. Some sanious pus discharged from wound upon pressure; did not disturb the sutures, but re-applied the compressing bandage. Bowels to be kept quiet with opiates.

20th. Feels very well; compresses got off during the night; the ligature upon the muscular branch came away; slight pulsation and sound detected in the tumor; compresses re-applied.

22d. Has had hemorrhage from the nose to-day; pulsation still perceptible slightly; adhesion of wound nearly complete, but suspecting pus beneath, I removed the quill sutures and found suppuration pretty free from deep-seated parts.

24th. This morning at 8 o’clock, the patient got out of bed, and on seating himself for an alvine evacuation, felt something suddenly “give way,” and was immediately deluged with blood flowing from the wound. He was at once assisted to the bed and placed upon his abdomen, while pressure was exerted upon the wound. The bleeding ceased at once. On reaching him, about half an hour after the accident, and removing the dressing, no blood issued; the wound did not gape open, nor could I see from what point the blood escaped, although the quantity lost was estimated by his room-mates at from a pint to a quart. The ligature still in place, with the projecting end covered with adhesive plaster. Tumor still pulsates feebly. Covered the wound with a thick compress, firmly bound down by a many-tailed bandage carried around the pelvis. Bled again from the nose to-day, showing the hemorrhagic diathesis
25th. At 4 o'clock P.M., the wound bled a little. I removed the dressing, but no blood issued. Re-applied compresses.  
26th. Finding early in the morning that blood had been oozing from the wound all night, I invited several professional friends to meet me at 9 o'clock A.M., when, on removing the dressings, the blood gushed out in a torrent. I at once tore asunder the adherent surfaces, washed out the wound with a solution of sulphate of zinc, and brought the ischiatic artery fairly into view. The blood flowed from just above the seat of ligature. Bits of lint were applied to the bleeding point, and the wound well packed with them after the manner suggested by Dr. Mott, so as effectually to arrest the hemorrhage. The patient being very much exhausted, was then turned upon the back, and brandy given him. In consultation with the physicians present, it was determined to proceed at once to take up the common iliac artery. Being indisposed at the time, I requested my friend Dr. Wm. J. Holt, late Surgeon in the Crimean war, to perform the operation, which he did. The patient's feeble state deterred us from using any anaesthetic. He was on the verge of syncope during the whole time of the operation, and vomited several times before its completion, although he lost no blood. The peritoneum was wounded in consequence of his movements. The artery having been tied, the wound was closed by quill sutures; compresses dipped in cold water applied over the abdomen and ordered to be kept cool; brandy and laudanum was administered; and the patient allowed to rest.  
27th. Passed a comfortless night; took one gr. opium every five or six hours, with a sufficient quantity of brandy; but gulped up continually whatever he took of broth or other drink; pulse bad; temperature of limb normal; no hemorrhage; some tenderness of abdomen; ordered opium pills, toddy, broth, iced water, and cold cloths to the abdomen to be continued.  
28th. Evidently sinking; pulse feeble and frequent; still gulps up every thing; limb warm; feels relieved of all soreness and thinks himself better.  
29th. Died at 4 o'clock A.M. No post-mortem examination made.  
Since these notes were taken, I have found only one case of the kind, and it resembles my own so closely, that I cannot re-
frain from appending it to this report, in the author's own words. It is contained in the Revue-Clinique, published in Paris in 1850, under the following caption:

"Aneurism of the Ischiatic Artery—Ligation of this Artery. By M. C. Sappey, Agrégré of the Faculty of Medicine of Paris.

Paul Dudire, mechanic, about fifty-five years of age, and of good constitution, says that when twelve years of age, he fell upon the left breech. Moderate pain and little inconvenience in walking, were all that followed the accident at first; but fifteen days later, the patient discovered a tumor about the size of a small nut, below and internally to the painful region. The tumor, perfectly indolent, round and without pulsation, remained so for ten years, without increase. After this, the tumor grew gradually, and during the interval between twenty-two and twenty-five years, it attained the size of a hen's egg; during this period of growth, pulsation developed itself by degrees. At twenty-five years the pulsations were very distinct; "very often," says the patient, "I amused myself by feeling them." Notwithstanding its progress, it remained indolent; and if at times it gave pain, it was because the sitting posture had been too much prolonged.

"Ten years more passed without the tumor making any progress, or presenting any other phenomena; the patient continued to walk as before and to work at his trade without difficulty. At thirty-five years of age, on the 27th of August, 1829, after being seated for a very long time, he felt a sharp and sudden pain in the left breech; the next day the tumor was found to have doubled in size, and to be about as large as a fist. He presented himself at the hospital of la Pitié, and was admitted into the wards of Prof. Laugier, whose duties devolved upon me during the months of September and October. After having obtained the above history, I made a careful examination of the tumor.

"It was situated upon the inferior border of the gluteus maximus, on a level with the tuberosity of the ischium, thus rendering the sitting posture uncomfortable.*

"Its volume, which was a little less than the fist, could be

* Yet as the tumor was easily pressed to one side, he could, by so doing, be seated for some length of time without pain.
partially reduced by a gradual compression. The integments over it were red, painful and analogous to those covering a phlegmonous abscess. The fingers applied to the surface, detected fluctuation, and consequently the existence of a liquid, which might have led to the belief that it was an acute abscess, had not the examination revealed at the same time another important phenomenon, the existence of pulsations synchronous to those of the arteries.

"These pulsations existed not only at the surface of the tumor, but also over the whole course of the ischiatic artery. By compressing this vessel immediately below the pyramidalis muscle, all pulsation ceased in the tumor, but returned as soon as the pressure was removed.

"By means of the stethoscope, applied immediately to the tumor, or along the course of the ischiatic artery, an intermittent blowing sound, synchronous with the contractions of the ventricles, was detected.

"All the phenomena clearly indicated the nature of the disease; it was an aneurism and this aneurism had its origin in the ischiatic artery. The latter point of diagnosis might alone be subject to doubt, yet the seat of the tumor on a level with the tuberosity of the ischium, its pulsations extending along the whole course of the ischiatic and being suspended and reproduced alternately as this artery was compressed, or not, appeared to me to offer such unequivocal signs that I could not hesitate in determining, which vessel was aneurismal.

"As this aneurism rested upon the tuberosity of the ischium, and involved an artery of the fourth class, I thought at first of treating it by compression. With this view, I used the spica bandage firmly applied, and in order to make this more effectual, I modified it by carrying the upper half of the figure of eight over the right shoulder, instead of around the abdomen. This reduced the size of the tumor but the pulsations persisted, and at the end of a fortnight no farther improvement being perceptible, I suggested to the patient the more decisive measure of ligating the aneurismal trunk which was done on the 21st September.

"In order to make the ligature, the patient lying upon the abdomen was subjected to the influence of chloroform, and I made
an incision fourteen centimetres in length, parallel with the median line, and at equal distances from the trochanter major and the tuberosity of the ischium over the course of the ischiatic artery. This incision extended successively through the skin, the subcutaneous cellular and adipose tissues, and the lower two-thirds of the gluteus maximus, dividing nine or ten muscular arteries, which had to be tied. Beneath the gluteus maximus, the ischiatic artery was detected by the finger, which was a great help to me inasmuch as the blood oozed abundantly from the whole surface of the wound, and concealed the parts from my eye notwithstanding the free use of the sponge. The artery was tortuous and scarcely larger than usual. A grooved director being passed beneath the lower edge of the muscle, parallel with its course, I exposed the vessel so as to be able to compress it between the thumb and index finger of the left hand. This compression immediately suspended the pulsations in the tumor, which returned as the compression was omitted. This experiment repeated several times with like results, effectually removed every doubt that might have been entertained as to the real vessel implicated. I then denuded the ischiatic artery and applied to it a silk ligature which suspended all pulsations.

"In order to unite this long and deep wound, I resorted to the quill sutures, which could alone approximate the edges in their entire thickness. Four stitches at equal distances sufficed. A single dressing was applied, retained by means of the spica bandage, and the patient put to bed.

"The night following the operation, the patient had a pretty smart fever; was restless, slept but little, perspired freely, but suffered very little pain. The next day the pulse was not so strong and less frequent. I deemed it prudent to leave the dressing undisturbed. On the second day, I proceeded to remove the dressing. The pulsations had not returned, the aneurism was notably diminished in size, and the wound seemed disposed to heal by the first intention. On the third day, I regretted to find that the tumor was the seat of feeble pulsations, and in order to prevent their return, I added to the force of compression. The lips of the wound had healed by the first intention, except at the outlet of the ligatures from which some
pus issued. On the fourth and subsequent days, notwithstanding the strong compression made upon the tumor, its pulsations became more and more decided and union by the first intention complete. All the threads came away except that upon the aneurismal artery, which remained until the eleventh day, at which time cicatization was nearly complete, but the tumor still pulsated, though with less force, and is not so large as it was before the operation. Compression was continued until the 22d October, but without success. I then abandoned it, and dreading the progress that this aneurism would unquestionably make if left to itself, I thought of treating it by the old method, that is to say by opening the sac. I communicated this to the patient, who seemed at first disposed to consent, but business calling him into the country he left Paris and did not return to the hospital. Two months after he left I saw him, and learned from him that the tumor was in the same state, that it gave him neither pain nor inconvenience, and that he would defer any farther operation.

"Remarks.—No instance of the ligature of the ischiatic artery for an aneurism of this vessel, has so far as I know, been recorded. Experience has therefore furnished us no indications for the treatment of such a case. On considering the two methods, that of Anel's ligature and that of opening the sac, I gave the preference to the former, in accordance with the general opinion which is in favor of ligating the internal iliac for aneurism of the breech, but this opinion, although perhaps correct, with regard to aneurisms of the gluteal artery, now appears to me altogether erroneous, with regard to those of the ischiatic. For in as much as the gluteal artery anastomoses with other vessels of the same class only by capillary ramifications, we may very well suppose that by obliterating its trunk, the blood will coagulate in the aneurism and thus effect a cure; but the ischiatic artery communicates with several branches of the femoral, and particularly with the internal circumflex and the first perforating artery by large vessels. In ligating this, therefore, we should not expect to arrest the ingress of blood in the tumor; we can only lessen the force of the current within it, but this will gradually increase until it becomes as great as ever, and thus render the operation unavailing. The reasons in favor of
the method of Anel, although perfectly applicable to the gluteal artery, are little or not at all so to the ischiatic artery. In order to ligate this artery by the method of Anel, we have to make an extensive and deep wound. Is it not more simple at once to lay open the sac? We need not apprehend here a great effusion of blood, as the vessel is small. The incision need not be more extensive, but would rather be smaller. The danger of this method would not be greater, and theory indicates that this operation will be more effectual.

"Conclusion.—In aneurisms of the ischiatic artery, we should prefer opening the sack to operating by the method of Anel."

We have already stated that authorities differ with regard to the point at which the vessel should be ligated in aneurisms of the breech; some advocating the ligature within the pelvis, and others preferring to place it upon the vessel outside of this cavity. Within the pelvis we may tie either the primitive or the internal iliac; externally, the affected vessel may be reached through the aneurismal sac, or be tied above this, as advocated by Bouisson. In cases in which it is optional with the surgeon to operate, either within or without the pelvis, it would be difficult to understand why he should prefer the former locality. There can assuredly be no comparison as to the relative difficulty and danger of the two methods of treatment. And yet we find the greatest discrepancy on this question between the highest French and American authorities. Velpeau thus expresses himself:

"If the obliteration of the hypogastric artery has the advantage of curing irrespectively all aneurisms of the breech, whatever may be the artery wounded, its manipulation is, in fact, so fearful, that we should be fortunate were we enabled to substitute for it the ligature upon the diseased artery itself. Now this appears to me practicable where we are treating a diffused or a circumscribed aneurism, or a traumatic, or a spontaneous aneurism, so often as the diseased portion of the artery is in the breech. In fact, the gluteal artery on leaving the pelvis, lies naked upon the anterior and superior border of the great ischiatic notch, so that were we obliged to open the tumor before reaching the origin (racine) of the vessel, it would still be a thousand
times preferable to the ligature upon the internal iliac artery. There it would be easy to compress it and to cauterize it, and close it with the end of the finger. Nothing would prevent us at first from introducing a conical gum-elastic bougie into the wounded artery, to arrest the blood and raise up the vessel until we should pass a ligature around it."

Dr. Mott thus summarily disposes of the subject:

"Those persons who have suggested the practicability of tying the trunk of either of those arteries on the cardiac principle, can never have seen an aneurism in this situation. Like many other great operators upon paper, they have formed their ideas in favor of, or against, an operation, merely by the dissection of the dead body. These are generally the most vindictive and censorious critics, and the most ignorant and dangerous surgeons. It must always be recollected that they predicate their conclusions as to the practicability of surgical operations on the living body, by the beautiful delineations of normal structure. Those who choose to retrograde to the ancient practice of opening the aneurismal sac by an incision a foot or two long, and reach for the artery at arm's length, in the midst of a gallon or two of coagulated blood and the gushing and roaring of the vital torrent, are at liberty to do so if they please.

"For our part, we prefer the more genteel method of tying the primitive trunk itself within the pelvis. It is only in all recent wounds of the region of the trunk of the gluteal or ischiatic arteries, that we should use all commendable industry and care in endeavoring to secure and tie the bleeding vessel, or to command the hemorrhage by the mode we have already pointed out, with small pieces of sponge and pressure."

With due deference to the very distinguished author, we must regard John Bell's celebrated case, to which the italicized allusion refers, as a striking illustration of the advantage of the external operation even under the most unpromising circumstances. His example has moreover been followed by many others since, and with very general success.

With the lights before me, I think the question narrowed down to the two modes of reaching the artery after its emergence from the pelvis. In all cases of aneurism of the breech, whether of the gluteal or the ischiatic artery, consequent upon a me-
chanical injury, recent or remote, I would prefer to lay open the sac in order to apply a ligature above and below the seat of injury, and thus to obviate the difficulty consequent upon the free anastomoses of these vessels. If I had to treat another case similar to the one I have just reported, I would not hesitate to adopt this method. In aneurisms of spontaneous development only, if they ever occur in this region, would I place the ligature above the sac. In the event of a failure of the operation outside the pelvis, we would still have in reserve a resort to the ligature within it.

ARTICLE XXIII.

Cases of Placenta Prævia and Uterine Hemorrhage, with Remarks.

By C. C. Howard, M. D., of Lowndesboro', Alabama.

The placenta, from its unusual location, retention or any abnormal condition, has characterized very few cases coming under my observation, in an experience of nearly twenty years. But last year, several such cases occurred in my practice, and a report of some of them, with an occasional remark, may be acceptable to the reader.

April 14, (10 o'clock P. M). I visited a negress aged twenty-eight years, form and size good—had borne two or three children. She was taken with occasional uterine pains, accompanied by hemorrhage, about 3 o'clock, P. M., while in the field; but she continued at work one or two hours, and was then taken to the house on a mule, somewhat enfeebled. Regarded as being in labor, she was entrusted to the care of an old negress, until the prostration became alarming, when I was called. I found her with a frequent pulse, often imperceptible at the wrist; extreme restlessness; thirst insatiable; tongue blanched and cool, and very slight hemorrhage. The os uteri, I then thought too imperfectly dilated to introduce the hand, but by the finger, readily detected a large, soft, fleshy mass, occupying it. Occasional uterine contractions. This woman had had a hemorrhage four months previously. This was the first case of "placenta prævia" I had seen.
Gave opiates—applied cloths wrung out of cold water, and vinegar, &c., and in two or three hours, with very little more hemorrhage, saw the woman die, undelivered. A post mortem examination fully revealed the placental presentation, with the breech second position.

If I had another such case, I think I would deliver in ten minutes. I know I would try. It is fair to add, that this is the only fatal case of hemorrhage I have ever seen.

June 1st. Called to see Lucy, aged thirty-five years—had borne many children. When I arrived, the placenta and body of dead foetus had just been expelled; and in one or two minutes, the shoulders and head were delivered—no hemorrhage, and none previously. The child had died but a few days before, as I had observed its movements very distinctly, less than a week previously. I had seen this woman, on account of a remittent fever, several times in the few weeks preceding her delivery: she was thin, and without any difficulty I could define the head, carry the arm of the child up towards it, and felt thoroughly satisfied as to its position in utero, which was confirmed in the birth. Indeed, the tactility was as great as I should expect ever to find it, in a case of extreme pregnancy. The owner of the woman was informed of the nature of the case, and it was anticipated with anxiety. But nature did her work promptly and well.

August 12th. Mrs. ——, aged thirty-five—had borne many children—was in premature labor—breech presentation—placenta partially over os uteri. Delivery of a living child at about six months, was accomplished without aid in two hours. Placenta promptly following. No hemorrhage during labor or for several days before. This lady had repeated hemorrhage within the last three months previous to the confinement—though for two weeks before, appeared to be doing well. So threatening, however, had the hemorrhage been on some occasions, that I gave, without any perceptible effect, ergot, to provoke the expulsion.

Neither from observation, or reflection, or at all, am I inclined to receive the explanation given in some of the books, of the cause of the more frequent occurrence of hemorrhage in the last two months of pregnancy in cases of placenta prævia—i. e.,
the relative expansion of the cervix uteri and growth of placenta. Indeed, I have not so observed it; but even if it be the fact, yet I doubt not the placenta grows proportionately with the uterine expansion. Is not the absence of a support at the os uteri more probably the cause?—the placenta laying over a foramen. True, uterine contractions will effect detachments; but I speak of hemorrhage without such contractions.

Sept. 26th. Called to see a negress, aged 30—borne several children. Found that she had three hours previous to my arrival, been delivered of a dead foetus; and was shown foetus and placenta in the relation they were expelled, as a reliable old negress stated. The placenta was on and around the left shoulder. Two thirds of the mass had evidently been very much compressed, and I doubted not that this had been done by the head in its passage, and the shoulder following, had brought it with it. No hemorrhage during the labor, or for months previous. But in the first few months of this pregnancy, I had repeatedly prescribed on account of hemorrhage. Suspecting the nature of the case, and by my advice, her owner, who resides in this village, brought her here to have her nearer at hand; but getting weary of her, sent her back to his plantation. Another peculiarity of this case, consisted in the insertion of the cord into the chorion, nearly equidistant from the placenta. The vessels of the cord bifurcated several times before reaching the placental mass. I have never observed this distribution of the cord, but once besides the above, and that was on the fourth day of same month.

Arriving at the bedside of a negress who had near an hour previously, been delivered of a dead child, and seeing no cause for its death; and finding that in pulling on the cord in removing the placenta, the membranes followed the cord, I examined it enough to induce me to take it home—when, with Drs. D. and C., found the insertion in the chorion, nearly equidistant from the placenta. There was but one artery. It did not bifurcate before reaching the placenta; but the vein did once or twice. The perforations of the membranes by the foetus was at considerable distance from the placenta, though the vessels did not appear to be injured from that cause. In the other case, some of the vessels were thus lacerated. In this case I doubted not that the death of the child was owing to the com-
pression of the vessels; for their relation must have been equivalent to a presentation of the cord.

Here I desire to dissent from those who consider the perforation in the membranes made by the foetus, as any reliable index whatever to the distance the placenta was placed from the os uteri. For it is evident that the point of perforation will depend very much upon the period in the labor, at which the membranes are ruptured.

November. Called in consultation to see Mrs. ———, aged about twenty-six—good form and size—had borne two children. She was thought to be within a few weeks of her full time, had had hemorrhage some days previously, and at different times. But little weakened however, by loss of blood. We gave opiates, astringents, &c., and thus the case progressed two or three days. Finally the hemorrhage became alarming from its continuance, amount and effect. The pulse preternaturally frequent and feeble—surface cool and blanched—sighing—and it became evident that delivery must be accomplished speedily. Passed the right hand up, on the left side of the uterus, by the placenta—ruptured the membranes—seized a foot, the breech being in apposition with the placenta, brought it down, and without any increase of hemorrhage whatever, accomplished delivery in twenty or thirty minutes. In such a case as this last was, the position of the child might be fully ascertained before rupturing the membranes.

From what I have seen or know of placenta praevia, I would not entertain the thought of passing the hand through the placenta. I would prefer, as in the above case, to pass up by it—deliver the child, and then the placenta. But in central cases, or those in which the hand had been passed on that side on which the placenta chiefly lay, I can conceive that the delivery of the placenta first, would be unavoidable. Still my effort should be to secure the promptest expulsion of the child.

It will be observed in four of these cases, the breech was in apposition with the placenta. Did the location of the placenta contribute in determining the position of the foetus?

Medical men do not snatch their patients out of the jaws of death, as frequently as many persons suppose, “by upwards of a good deal.” Yet I fear I have lost cases when others could
have saved them; for no medical man should raise for himself a lower standard than the accomplishment of the best that could be done. And if he be an idler, let him not soothe his conscience with the "flattering emotion" that he has done the best which he could do, under the existing circumstances. But while I do not reflect upon the first case reported, with much complacency, this last elevates our noble profession in my estimation. And as we cannot tell when such cases may fall into our hands, I trust this report will, at least, induce the reader whether long or recently in the profession, to propound to his mind and conscience the question of preparation for them.

ARTICLE XXIV.

Tannin in Large Doses in Albuminous Anasarca. (Translated from the Journal de Médecine et de Chirurgie Pratiques, for the Southern Medical and Surgical Journal,) by William Farell, M. D., of Rome, Georgia.

Pure tannin, tannic, or gallic acid, such as is obtained by the process of M. Pelouze, has been but little employed in France, in large doses; but in Germany, England and Portugal, MM. Liebert, Lees, Frerichs, Scott, Allison, Burns, of Glasgow, W. Bayes, and Barral, have prescribed it with success in doses of two to six grammes, (30 to 90 grains nearly,) in the treatment of albuminuria, diabetes, hæmoptysis, hemorrhage, chlorosis, certain cases of morbid secretions, general debility, &c.

These facts prompted Dr. P. Garnier, a practitioner of Paris, to experiment with this agent in the treatment of albuminous anasarca, so frequently met with, and so often rebellious to the ordinary means. M. Garnier has published some of his observations in the Archives Général de Médecine, from which it would appear, that the morbid phenomena, having the common character of more or less general infiltration of the cellular tissue, with albuminous urine, have rapidly and simultaneously disappeared, under the influence of tannin in large doses.

The first of these observations relates to a little boy of three years, who, during the desquamating period of an attack
of scarlatina, suddenly presented an enormously bloated condition of the face, hands and feet, with tumid abdomen, and absence of urine during the night. Calomel, jalap, mall pellitory, nitrate of potassa, &c., were successively and repeatedly given, while the general infiltration increased until the patient could not rest on his seat. The skin became tense, shining, translucent, and apparently ready to burst; the penis was twisted upon itself and hid in the scrotum, and urine was charged with albumen. Convulsions soon supervened, which caused the dropsical effusion to yield slightly under their violent action; but it soon augmented anew, notwithstanding the use of the decoction of horse-radish, Dover's powder, tartrate of potassa, &c. M. Garnier, in despair, thought of tannin, and prescribed the following solution:

Tannin " 2 grms. " (About grs. xxxj.)
Distilled water
Syrup of cinchona " aa 30 grms. " (Say aa fʒj.)

The patient took a spoonful of this solution three times per day, continuing the tonic regimen, pursued for the last eight days.

This treatment was commenced on the 12th of January, (1859.) On the 14th, the most abundant diuresis came on; the urine flowed so frequently and copiously, that the constant use of a urinal became necessary. The tumidness greatly diminished. The solution was regularly continued up to the 18th of February; the child having taken as much as five grammes (77 grains nearly) of tannin in six days.

Under this treatment the appetite was developed, constipation relieved, and diuresis and transpiration well established, without other medical interference. On the 20th of February, the cure was complete.

After these important facts in his own practice, M. Garnier alludes to similar ones in the practice of foreign physicians.

He cites the case of a young woman, treated by M. Sampson for anasarca, complicated with "chloro-anémie." Her urine contained albumen and sanguineous globules.

This patient took three doses of fifty centigrammes of gallic acid per day, (7½ grains nearly per dose, or about 23 grains per
day,) and at the end of a week after, she was entirely relieved of the oedema, and not a trace of the abnormal modification of the urine remained.

We also notice, in this memoir, the case of a man, who labored under anasarca and albuminuria, for which diuretics and purgatives were freely used without effect. Professor Barral prescribed the following pills for him:

Tannin " 30 centigr. " (About 4\(\frac{1}{2}\) grains.)
Gum Arabic " 4 grms. " (Say 1 drachm.)
Syrup " q. s.

Make one dozen pills.

The patient took three of these pills the first day, six the second, and nine the third, and so on. On the fourth day, the oedema was sensibly diminished and the urine flowed copiously. On the tenth day the cure was nearly complete. A few days later, Bland's pills were substituted for those of tannin. In this case, six grammes (about 92\(\frac{1}{2}\) grains) of this acid proved sufficient to relieve the infiltration.

Tannin affords more advantages in draught, than in pills, but as the tannic solution becomes decomposed and altered after a few days, M. Bayes prefers the pillular form. It is necessary, however, when the pills are used, to administer them at meal-time, unless the patient be allowed to drink freely immediately after taking them. M. Garnier usually prescribes it in solution, in his practice, using mucilage as a vehicle to mask its disagreeable taste.

Counter-Extension with Adhesive Plaster. By J. MCF. GASTON, M. D., Columbia, S. C.

The use of adhesive plaster for the purpose of extension, is generally and favorably known to the profession, but its application as a measure of counter-extension requires to be brought more fully to the attention of practitioners, and a case of fracture of the femur, which has been treated chiefly by this process, may serve to illustrate this procedure.

Rufus, a servant of Mr. John Davis, was placed under our care on June 16th, and upon a special examination with my partner, Dr. A. N. Talley, a comminuted fracture of the lower
third of the shaft of the femur was discovered. With the assistance of two of our students, extension was effected, and after copulation of the fragments, the roller bandage was applied to the entire limb. Three splints were next fitted to the thigh, and Welch's long extension apparatus was then adjusted by a gaiter, to secure the ankle to the foot-board beneath, and a silk handkerchief wrapped around a roll of cotton as a perineal bandage, tied firmly to the upper end of the long splint above the crest of the malleolus. By means of a screw connected with the apparatus, extension was now made, until the measurement from the anterior spinous process of the ilium to the internal malleolus was found to correspond to that of the sound limb.

The muscular development of the thigh afforded great resistance, yet the extension was steadily maintained for a week, when there was such excoriation from the perineal bandage, as to induce a discontinuance of this mode of counter-extension, for the application of adhesive plaster, on the principle, but not precisely in the form, suggested by Dr. Gilbert of Philadelphia.

A strip of strong linen plaster, two inches wide, and two feet in length, was doubled upon itself at an angle, so as to make a loop, and yet both of the extremities having their adhering surfaces in the same direction. One of the free ends was pasted closely over the spinous process of the ileum, and extended down towards the inguinal region; while the other end was carried down and passed over the trochanter, so that both pieces had firm attachments, by the closeness of the integument to these bony prominences, and thus presented resistance to traction upon the loop above. Transverse strips were placed from one piece to the other, to secure their adhesion. A piece of homespun was now passed through this loop and made fast to the upper end of the long splint, thus effecting counter-extension. When the apparatus was tightened by the screw, it was found that all the indications were met satisfactorily, while the excoriated hip and the perineum were left entirely free for such applications as the ulceration required. The strips adhered closely for three weeks without interference, and have proven an efficient means of counter-extension.

Those who may be interested in this subject, will find a well written article on the adaptation of adhesive plasters to counter-extension, by Dr. D. Gilbert, in the April number of the American Journal of Medical Sciences, in which he details his mode of application and the principles involved in their use; while other articles from his pen may be found in the numbers for January 1851 and 1858, in the same journal.

The only particular in which my proceeding is entitled to any superiority over the process of Dr Gilbert is, that it makes the
attachment of the strips extend over the firm unyielding points of bone, and thus serve, perhaps, to give a more fixed resistance to the force of extension. But while this is original with me, I prefer no claim which shall lessen the appreciation of the eminent service which has been rendered to the profession by the elaborate articles above referred to, and I trust that all may profit by their perusal, and cease to punish the subject of fracture with the excoriations of a perineal bandage.

In connection with this application of adhesive plaster, I would notice its use also in a case of fracture of the patella, which occurred in our practice recently. Being called on Feb. 7th, of this year, to a servant of Mr. Robert Bryce, Dr. Talley and I went together, and found a transverse fracture of the patella, with the upper fragment drawn up considerably by the contraction of the muscles. Bringing the fragments in apposition, a figure of eight bandage was first applied, but subsequently, at the suggestion of my brother, Dr. J. B. Gaston, of Montgomery, Alabama, we resorted to the use of adhesive strips, to keep the fragments in apposition. Three pieces of plaster, an inch wide and twelve inches long, were carried from above the knee round the inner side of the patella to the upper and inner part of the leg; while three other similar pieces were carried from above the knee around the outer side of the patella, to the upper and outer portions of the leg, thus keeping down the upper fragment of bone securely. Another set of strips were attached in a semi-circular arrangement around the lower fragment, by which accurate apposition of the fragments was effectually maintained. This plan of treatment is attributed to Dr. Neill, and Erichson makes reference to it in his work on Surgery. Our case progressed favorably, and though the union is not osseous, the connecting layer of cartilage is perhaps shorter and firmer than is usual in this accident, and does not interfere at all with locomotion.

In a fracture of a similar kind, which I treated some years ago, the case was managed throughout by the figure of eight bandages, with a good result as to the union of the fragments; but I had to keep the entire leg and thigh encircled with a roller,—the latter to control the action of the muscles, and the former to suppress the swelling which would have ensued from the obstruction to blood vessels and absorbents at the knee. This difficulty is entirely obviated in using the adhesive plaster, as it extends only partially around the limb, and leaving that region free where most of the vessels are located. And the same views hold in reference to their application to the upper and outer part of the thigh, instead of extending round the inner part, where the vessels and nerves are located.

Enough has been said to indicate the advantages of the ad-
hesive strips in this class of cases, but at a future day I propose to give my personal experience in the treatment of inflammation by the compression of adhesive plasters.——[Charleston Med. Journal and Review.

Puerperal Convulsions Successfully Treated by Croton Oil Suppositories. Letter from Mr. Overton.

Puerperal convulsions are usually so alarmingly dangerous, and cause so much anxiety, both to relatives and friends—ay, and to the medical attendant, at the same time—and are often so rebellious to all treatment, that I trust you will deem the two following cases, extracted from my note-book, worthy of insertion in your columns.

Case 1.—Mrs. R., aged twenty-four, married about two years. A miscarriage took place six months after marriage, when she suffered considerably from nervous excitement; which, however, soon yielded to appropriate treatment. She was again pregnant in September, 1858, and enjoyed good health till February, 1859, when I received a summons to visit her immediately. I found her suffering from general anasarca, with excruciating pain in the head, restlessness, vomiting, and febrile symptoms. Upon the whole, I did not like the appearance of those symptoms. I prescribed saline aperients, with alteratives, etc.; cold applications to the head. The symptoms did not yield to this treatment: constipation gave some trouble.

March 15.—I was again sent for in great haste; the husband stating that his wife was in a fit, and all feared she was dying. I was soon with her, and found her suffering from epileptiform puerperal convulsions, frothy blood issuing from her mouth, and there were clonic spasms present. I at once abstracted blood from the arm, to about thirty ounces, put six to eight grains of calomel on her tongue, administered an enema of senna, etc., and applied a blister to the nape of the neck. These, combined with cold applications, produced little or no other effect than that of mitigating the acute pain in the head, between the convulsive paroxysms, which paroxysms became frequent. The patient having had no relief from the bowels, I deemed it advisable to mix six drops of croton oil with lard, in the form of a suppository, and so use it. This produced tenesmus, with a sense of smarting, burning heat in the lower bowel; but relief followed, and a copious watery evacuation almost immediately ensued. The patient had no more convulsions. Upon examination, I found no signs of on-coming labor, nor did the slightest chance of producing it present itself.

16th.—On my visit this morning, I found Mrs. R. calm, and
free from convulsive symptoms; the anasarca had disappeared; micturition normal; bowels relieved (largely) four times; os uteri in the same state as before.

17th.—I found her dressed, and sitting by the fire in a lower room.

24th.—I was again sent for; and this time I found her in labor, the os uteri fully dilated, and the head presenting. Fearing a recurrence of the convulsions, I turned the child, and delivered her of a still-born, putrid child.

25th.—I found her quiet and comfortable, she had passed a good night, and from that period she went on well without one unfavorable symptom.

Case 2.—Puerperal Convulsions; recovery; subsequent death from swallowing a row of front false teeth. February 18.—Anna F., aged twenty-two, a country servant, primipara, unmarried, six months advanced in pregnancy. The man to whom she was engaged to be married left the neighborhood, and married another woman. This event produced great despondency, and on her way home to see her mother, she was seized with convulsions about every ten minutes. At this time she lost four front teeth, fixed on a silver plate; they could not be found. She had swallowed them. I was sent for, and found her suffering from puerperal convulsions. Blood issued from her mouth; the tongue bitten severely; clonic spasms; head cool; pulse small and compressible; micturition scanty; bowels not open. Upon examination, I found the os uteri high up in the pelvis contracted. I introduced the catheter, and some urine came away. I then administered an enema of castor oil and ol. terebinth, and put 10 grs. of calomel on her tongue. I waited two hours; but no amendment was perceptible. I now ordered 8 drops of croton oil to be rubbed into some cerate, and so passed into the rectum. In a few minutes, she complained of great tenesmus and smarting pain in the bowels. Twelve large watery evacuations followed. No more convulsions. I enjoined perfect quiet, and left her.

19th.—Found her better in every respect. No return of convulsions; she complained only of some soreness in the throat; but there was no dyspnea.

20th.—I was sent for in the night; natural labor was going rapidly on; a large quantity of liq. amnii was discharged, and in a short time she gave birth to a dead child.

21st.—A good night; no pain in the head; lochia natural; urine had been passed; pulse good; tongue moist, but injured during the convulsions. All went on remarkably well till the tenth day, when, as she was sitting up in the bed drinking a cup of tea, and talking cheerfully with her mother, she suddenly called for a basin; vomited a large quantity of blood, sank back on her pillow, and expired.
The cause of death was evidently from the false teeth, or some portion of the metallic fastening, having penetrated some large vessel. No post-mortem inspection could be obtained.—[Med. Times and Gazette.

Relative Value of Different Anthelmintics in the Treatment of Tenia.

By Dr. Peacock, Assistant Physician to St. Thomas's Hospital.

The following is a brief summary of a series of cases in which different anthelmintics had been employed against tapeworm. The patients were all treated by Dr. Peacock, in the out-patients' department at St. Thomas's Hospital, and we are indebted to him for access to the detailed notes upon which the statements are founded:

As a general result of his experience both in public and private, Dr. Peacock states that he gives preference to the oil of male fern before all other remedies, and that he holds the kousso in very light estimation indeed. It appears that of the hospital cases respecting which notes have been preserved, the fern oil was given in thirty-five. Of these, in sixteen no other remedy had been previously tried, and in this group the result was always satisfactory, the animal being expelled in a dead or dying state. In seven cases the oil was given after the partially successful use of kousso, and in all these more of the worm was brought away. In three, after partial success by pomegranate bark, the oil brought away other portions of the parasite, and in one a like result was obtained after the use of the turpentine draught. In six cases in which the oil was used, either the result was not satisfactory, or the patient did not attend again. The dose of the oil given was from half a drachm to a drachm and a half to children, and from a drachm to three drachms to adults.*

The cases in which the kameeala was given are seven. In five of these no other remedy has been previously tried, and in all these portions of worm (generally quite alive) were expelled. In one the expulsion of worm was caused after kousso had been tried without effect, and in the fifth, which was under similar circumstances, a like negative result followed its use also. In two cases after the successful employment of the kameeala, the oil of fern was employed without procuring the expulsion of any more of the

* We are informed that great care is necessary on the part of the dispenser, in order to avoid disappointment in the use of the oil of fern. Its oiled solution, which is by far its best preparation, on standing departs its resinous principle. A prolonged shaking is necessary to secure red mixture. Unless the dispenser pay more than usual attention to this matter, the patient is very likely to get a dose which is but little more than ether.
worm. The dose of kameela prescribed was from half a drachm to a drachm for children, and from one to three drachms to adults.

It would from the above facts appear that kameela is more efficient than kousso, but that it must rank as a verminfuge rather than a true vermicide. After the fern oil the animal is usually voided dead. An important statement with regard to the comparative value of kameela, is made by Mr. Henry Callaway formerly of Finsbury Circus, but now a medical missionary amongst the Zulus. The kameela is the native remedy among the aborigines; but, in a letter to the 'Pharmaceutical Journal,' Mr. Callaway states, that from experience they have learned already to put much more confidence in "the white man's dose." The latter consisted of turpentine and castor oil, the time-honored remedy among ourselves. We are not able, from Dr. Peacock's cases, to institute any comparison between turpentine and fern oil, and can only state that we believe he is supported by several other hospital physicians who have given much attention to this matter, in maintaining that the latter ought to stand facial princeps among our anthelmintic drugs.

As regards the economics of the question, which are important in hospital and union practice, it will, of course, be easily granted that, all things considered, the most efficient remedy will probably in the end prove the cheapest. A dose of castor oil and turpentine, undoubtedly, costs far less than any of the others. Next to it comes the kousso, which has as rapidly fallen in price as it has in general estimation. The kameela is, as yet, rather expensive, though not nearly so much so as the fern oil. A full dose of the last costs eightpence, of the kameela about fourpence, of the kousso threepence, and of the turpentine and castor oil not more than three-halfpence.

Kuchenmeister, in his 'Manual on Parasites,' (Sydenham Society's edition,) writes of the oil of turpentine as follows: "As has already been remarked, the touchstone of a remedy for tapeworm is not whether it expels bothriocephalus latus or tenia solium, but whether it is also capable of effecting this with t. medio-canellata. That oil of turpentine is efficacious in the latter case I can prove at any time; for the finest specimen of tenia med. that I ever saw was expelled by it. In general also it acts pretty rapidly. Lastly, it has also the advantage that it expels the worm entire." Of the kousso he writes, "For my part I have always been more or less unlucky with this remedy. . . . I have generally seen the worm expelled in innumerable fragments. . . . I have never found the head. In one case I detected fragments in the evacuations for three months." Professor Martius, of Erlangen, who also has used kousso largely, never saw the head brought away. Of the male fern, Kuchenmeister states; "This remedy, which will always maintain its renown against the bothriocephali, appears
hardly to maintain its reputation with regard to tænia. The kameela he had not tried.

Of the desirability of having the intestinal canal as empty as may be before giving anthelmintics, most practitioners are aware. To administer them fasting in the morning is usually thought sufficient; but in cases where difficulty has been encountered in destroying the animal it may be well, as an introductory measure, to give a sharp purgative.—[Ibid.] 


The following is a brief résumé of a long paper which appeared in the American Journal of the Medical Sciences for July, 1859, upon carroval and vao, two new varieties of woorara, or curare, as it is termed in France. The authors preface their own observations with an elaborate history of woorara, and of the chemical and physiological labors already bestowed upon it by Rolliker, Bernard, Pelikan, Velpeau, Brodie, etc. They then proceed to describe the physical characters, chemistry, physiological relations, and toxic peculiarities of the two new, or hitherto unknown varieties of woorara which have fallen into their hands. They thus examine separately the two substances carroval and vao, and state in detail the reasons which induced them to consider vao as but a weaker carroval: or else, if we comprehend them aright, as bearing to carroval some such relation as brucia bears to strychnia, or cinchonia to quinia.

Both poisons yielded, to appearance, one and the same essential principle, a new alkaloid, which the authors have termed carrovalia. This substance, whether from vao or carroval, was of a deadly potency; since, however, the authors explain that their supply of the poison was not sufficient to enable them to complete the chemistry of the subject, we shall await some further developments in regard to the tests for the new alkaloid. Although the two poisons were studied separately, it is unnecessary here to view them apart, since it has been shown that the chief dissimilarity is one of degree, and not of kind.

The new woorara, then, according to Drs. Hammond and Mitchell, differs remarkably from that long known to the toxicologists of Europe. Thus the woorara of our authors kills by paralyzing the heart; while the other, or European woorara, destroys by paralyzing the nerves of motion throughout the body. This singular difference completely isolates the carroval and vao poisons from all other woorara hitherto examined, and approximates them in character to the upas poison, so ably investigated
by Professor Rolliker, whose toxicological labors are as yet little known or appreciated in this country.

We refer to the following "conclusions," as setting forth what the authors conceive themselves to have proved in regard to these poisons, premising that as they seem to have been finally of opinion that carroval and vao are nearly allied, if not identical, we have thought it unnecessary to copy both sets of conclusions. We have appended to each conclusion, in brief form, a statement of the proofs in favor of the proposition set forth.

1. Carroval and vao are capable of being absorbed from the areolar tissues, and from the stomach of warm and cold-blooded animals. When given by the stomach, both poisons are more apt to cause convulsions than under other circumstances. The larger part of the absorption experiments were made with vao only. From these it was ascertained, say our authors, that it(vao) is also absorbed by the stomach, esophageal canal, rectum, and skin of cold-blooded animals, (frogs,) with a degree of rapidity which varies; and is rapid or slow as the animal is ill or well supplied with water.

Warm-blooded animals absorb vao from the stomach and intestines when they are fasting, but suffer no ill effects when the vao is given during digestion. That this protection is not due to a mere mixture of the vao with the food of the full stomach, is shown by the fact that rabbits, whose stomachs are always more or less distended with food, are protected only when, owing to the entry of fresh food, digestion becomes active.

Both carroval and vao arrested the heart's action. This was shown by exposing the hearts of frogs, and then inserting the poisons under the skin, when the heart began to beat more strongly, then became paralyzed in parts, and finally stopped, and was found to be so dead, that in most cases no galvanic or other stimulus could induce a single pulsation. After this, the frogs thus poisoned leapt about until the cessation of the circulation produced its usual effect, in paralyzing first the sensitive and then the motor nerves. These secondary effects our authors have shown to follow any arrest of circulation in the frog. Thus, when the heart was tied, sensation and motion disappeared in an hour, even when no poison was given. Both carroval and vao were found to arrest very early the motion of the lymph hearts, and both of them undoubtedly lessened the duration of muscular irritability; while the ordinary woora either does not effect it, or, according to Bernard, lengthens its duration.

When these poisons are administered to warm-blooded animals, death usually occurs without convulsions, except in the cat, where they nearly always are seen. In animals of this class, the arrested circulation stops the aeration of the blood, so that the checked respiration is to be looked upon as a consequence and
not a cause of the injury to the cardiac functions. This was also illustrated in the case of the alligator, whose respiration continued long after the heart had ceased to move. It was also found that artificial respiration was of no value as a means of relief, as might have been suspected from the fact that the poisons destroyed the muscular irritability of the heart.

The authors were unable to discover that these poisons altered the blood, or affected the ciliary movements. They are of the opinion that the varieties of arrow-poison examined by them are of a purely vegetable origin, and contains no trace of the venom of serpents.—[North American Med. Chir. Review.

On a New Poison from the Interior of China. By Robert Chish- tison, M. D., Professor of Materia Medica in the University of Edinburg.

About eighteen months ago I received from China a copy of a newspaper printed at Shanghai, giving an account of a formidable poison, said to be used far west in the interior of the country, for killing game and in warfare.

According to this account, springs had been invented for using it against the British invaders; and as these had been found to answer against goats, much was expected from its aid at Canton. But, unluckily, the sudden peace nipped the scheme in the bud. That the poison might have been employed with deadly effect is very probable, if only one-half of what was said of it be true; for the account in the Northern China Journal, (April 4, 1857,) represents it to be so virulent that "instant death is inevitable from the slightest abrasion" by an arrow tipped with it. The operator, who prepares it in the shape of an extract, goes on concentrating and strengthening it until a small animal, whose skin is punctured with it, dies instantaneously: not until then, it seems, does he cease to boil down his extract. In the mountainous regions of Chihkiang large game is killed by means of arrows whose neck is encircled by the poison. Even tigers are killed in this way by the Funghwa hunters. Should a limb be struck, the beast writhes awhile before expiring; but should the arrow "hit the body, he leaps forward, staggers, and immediately falls down dead."

This is marvelous enough. But it is also said to be of a singularly volatile or progressing nature. For if the poison "be applied to blood trickling from a little wound, even though only to the lower end of the stream, the blood is rapidly blackened along its whole length; and if the stream be continuous with the wound, the subtle poison will enter, and occasion death."

This poison is the extract of a root called Tsau-wu; and the
plant is represented to be a perennial creeper inhabiting the central provinces of the Chinese Empire. It is added that the extract, is sometimes applied, as a practical joke, to the tongue of the unwary, "in whom it excites a keen sense of formication."

In the beginning of January last, I received specimens relative to this extraordinary poison from Dr. D. J. Macgowan, an American physician, residing at Ningpo. The specimens included not only the poison itself, but likewise some leaves and roots of the plant which yields it. The materials are scanty; yet they are sufficient to enable me to ascertain the source of the poison pretty nearly.

The leaves present characters common to several plants of the Ranuculaceous family. Only one of the roots, which are but four in number, is entire; but even the structure of this alone, taken along with its singular impression on the organs of taste, is sufficient to prove that the plant is a species of Aconitum, or Monkshood. All the species of Aconitum that I have examined spread by roots in the following manner, of which the A. Napellus may be taken for an example. During winter there is nothing to be seen but an under-ground tuber, tap-shaped in all the poisonous species, with rootlets from the lower extremity, and an incipient leafy bud at the crown. Early in the spring bud begins to shoot out into the future stem, which attains its full stature toward the close of summer, or a little later. During its progress, early in summer, a little knot forms near where the crown and stem meet; and from this is gradually produced a new tuber exactly like the primary one, parallel to it and connected with it by a small band. Near the close of autumn, when the seeds of the plant are mostly ripe, both tubers seem equally vigorous, and of equal size; but the new one is firm, and continues plump on being dried, while the old one is more watery, shrivels much in drying, and, in fact, soon rots and disappears in the ground, leaving the new tuber to perpetuate the plant next season. Now, one of the Chinese roots shows a portion of the stem, with its tap-shaped, somewhat shriveled tuber at the bottom; and, attached to the crown of this tuber, a plump, firm, tough tap-shaped tuber of the same size. No one familiar with the Aconites can fail to recognize in this Chinese specimen a miniature representation of the root of the A. Napellus of Europe, and A. Ferox of the Himalayas.

The likeness is maintained in the very singular impression produced by this root upon the organs of taste. A little bit, no bigger than a pin's head, carefully chewed, while it is held in one spot between the tip of the tongue and the lips, produces intensely that strange combination of numbness and tingling which characterizes so remarkably all the poisonous species of the known Aconites. It is an impression so peculiar, that I do not know any plant, not an Aconite, which produces a sensation like it, except
the Delphinium Staphysagria, or Stavesacre,—another plant of the Ranunculaceae, which, with its whole genus, presents close natural resemblances to the Monkshoods.

I have no doubt, therefore, that the Tsau-wû, or Wu-tsau,—for the name is variously given by my informant in his letters and in the labels,—is the root of a Monkshood. It is probably a new species; for, though like a diminutive A. Napellus, it is much whiter and more amylaceous in its interior, and yet evidently, from its taste, much more active. It is by much the smallest aconite root of the poisonous species; for the whole tuber is scarcely an inch long, and delicate in its structure.

It only remains to be seen whether the poison is really prepared from this root. The extract sent to me is still soft, and evidently made with great care and skill. The most minute portion causes in the tongue and lips precisely the same impression as the Wu-tsau root, but with extraordinary intensity. The Wu-tsau is in it therefore; and nothing more is wanted to make a most virulent and efficacious arrow-poison.

I must here enter my protest, however, against some of the statements which have been made to Dr. Macgowan by his Chinese informants, as to the action of this extraordinary poison—and, indeed, against the facility of belief among travellers generally respecting the effects of arrow-poisons used by barbarous and semi-barbarous tribes of men. The Wu-tsau cannot by any possibility travel up a stream of blood, against the current, and into a blood-vessel. It cannot cause instant death in any animal. No arrow-poison can cause instant death. All poisons which act through a wound must take a little time to act; because they act through absorption into the blood upon distant parts—the brain, the spine, or the heart; and a solid poison cannot thus reach its destination in sufficient quantity all in a moment, even though the arrow pierce a blood-vessel.

It is possible to account for the frequent error of travellers as to the alleged instantaneousness of the action of arrow-poisons. The lapse of time is, in the first instance, apt to be overlooked or understated. But, further, if such formidable poisoned arrows as those used by the negroes of the Upper Gambia, or the Macusi tribe at the sources of the Essequebo, be struck into the trunk of even a large animal by means of their strong bows, the arrow may quite well reach a vital part, and thus arrest motion at least, if not occasion very speedy death, merely as an arrow, by mechanical violence. Small animals and birds may be thus brought down suddenly even by the little wooden darts shot through blowing-tubes by the Macusi natives of the Essequebo, as well as other wild tribes. The Macusi use the deadly Urari* poison. But

* Generally corrupted by English writers into Wourali, and by the French into Curare. Schomburgk, the best authority, says that the Macusis who make it call it invariably Urari.
the dart may kill as an arrow quite as well as through means of
the poison, should it hit the trunk of a small animal; for its force
is surprisingly great. With very little practice, I can blow the
little light, wooden dart 180 feet; strike it at 60 feet so firm-
ly into a board that it cannot be removed unbroken; and trans-
fix with it, at a short distance, a fir board a fourth of an inch in
thickness, or thirty folds of cartridge-paper.

I will also venture to take exception to the frequent propensity
of travellers and others to magnify savage skill in the manufacture
of such poisons, at the expense of civilized ingenuity. The Urari
of the Essequebo, the Upo or Upas of Java and Borneo, the Wu-
tsa of China, are potent poisons, no doubt. But in potency they
never will stand comparison with several of the pure principles
which the chemistry of civilized nations has detached from poison-
ous vegetables. Any tribe of men, compelled by circumstances
to obtain their food by shooting game with poisoned arrows,
would profit greatly could they substitute digitaline, aconitina,
conia, strychnia, and other pure principles of plants, for their own
cruder extractiform poisons. These principles, indeed, might be
so used as to deal destruction to the very largest animals on the
face of the globe.—[Edinburgh Med. Journal, and North Amer.

Use of Sulphate of Copper and Opium in Diarrhoea, occasioned by
Dentition. By Dr. Eisenmann, of Würzburg.

During first dentition children are frequently affected with diar-
rhoea. It is often so slight that parents do not regard it as a dis-
ease, and leave it to the action of nature only; at other times,
however, especially when dentition coincides with weaning, the
evacuations are copious, and the diarrhoea passes into the chronic
state. Then the patient becomes remarkably thin, and nervous
symptoms of all kinds arise; sometimes that morbid condition is
developed which has been confounded with acute hydrocephalus,
but which Marshall Hall has designated by the name of hydro-
cephaloid. When it has passed into the chronic state this diar-
rhoea is frequently fatal, the little patients dying in marasmus.

I have found a medicament, the use of which has been attend-
ed by extremely favorable results in a great number of cases of
these diarrhoeas.

In the autumn of 1838 Dr. Rössel, Bavarian Aide-Major, then
in garrison at the fort of Oberhaus, consulted me about a child in
a low state from a diarrhoea of dentition. Sophie Krick was of
delicate health; she commenced to cut her teeth with her second
year. After the appearance of the first teeth she was taken with
a diarrhoea, to which the parents at first paid no attention; but
soon afterwards the evacuations became serious, persisted for
three months, and so reduced the child that only skin and bones
remained. She was continually in a state of coma vigil; pulse
very frequent, and hardly perceptible; no appetite, and constant
thirst; in a word, her condition appeared desperate. Upon my
proposition, Dr. Ræssel prescribed the sulphate of copper, asso-
ciated with opium, in the following proportions:

Sulphate of copper, gr. \(\frac{1}{4}\).
Opium, \(\frac{1}{12}\).
Sugar, q. s.

Recommending three powders a day to be given.

The first four days there was a marked amendment, the evacua-
tions became less frequent and less serious, and three days after
the little patient commenced to convalesce. The diarrhœa ceased,
the appetite returned, and digestion was re-established; the
strength and the normal size of the body sensibly increased, and
four weeks after the cure was completed. This case created a
considerable sensation in the neighborhood, and soon after Dr.
Ræssel had two similar cases to treat. He called me in consulta-
tion, and we agreed to employ the same means, and the results
were equally favorable in the two cases.

In 1840, I had an opportunity to observe a fourth case of this
diarrhœa at the fort of Oberhaus. The little patient presented
the same symptoms as those I have just mentioned, with this dif-
fERENCE, that vomiting still persisted, and that the disease had only
continued for fifteen days. The emaciation, however, was very
marked, the abdomen tumid, and sensitive to pressure; appetite
bad, and great thirst; the respiration was accelerated, and there
were mucous râles, without any other symptom of a pulmonary
lesion; countenance pale, and a little tumefied, the expression in-
dicating apathy. I prescribed the sulphate of copper with opium,
according to the formula given above, and twelve of these pow-
ders brought about in four days convalescence, which was very
Monthly.

On the Treatment of Purpura Hæmorrhagica by Tincture of Larch
Bark. By Dr. S. L. Hardy, Physician to the Hospital for
Diseases of Children, Dublin.

Dr. Hardy tells us that he has been long in the habit of using
larch bark as a stypic and carminative tonic. The tincture is of
a dark carmine color, with an agreeable "pinic" smell. In taste
it partakes of that of the oleo-resins. "It is," says Dr. Moore,
"one of the most elegant forms at our disposal of prescribing a
terebinthinate."
Case 1.—A boy, æt. 16 years, who had frequently been a patient at the Hospital for the Diseases of Children, was presented for treatment on September 6th. His appearance was that of extreme debility; he could scarcely walk; his pulse was exceedingly feeble, and his countenance pale and dejected. He was ordered the Liquor Pernitratis Ferri, with good nourishing diet. Having continued this treatment until the 15th, it was perceived that his symptoms were much aggravated; and there now existed a very extensive crop of spots of purpura over his entire body; his skin was harsh, dry, and contracted; his spirits greatly depressed; and altogether his general appearance was most unpromising. There had not been hemorrhage from the gums or by stool. Tincture of larch bark was now substituted for the iron, in fifteen drop doses, to be taken every two hours.

The immediate improvement which resulted from this medicine was most remarkable; all traces of purpura disappeared, and his strength became so perfectly restored, that on the 23d instant he ceased to require further treatment.

Case 2.—E. C,—a female child, æt. 7 years, residing in a small and badly-ventilated house, was brought to the Hospital for the Diseases of Children, on the 10th of August, having been a week ill. The account given by her mother was, that she had bleeding of the nose and gums, with discharges of blood from the bowels, and had lost all her strength. Her appearance agreed most truly with this statement. There was great debility, with a look of general distress in her countenance, sometimes more forcibly expressed by a knitting of the brows. Her body and extremities were covered with a very extensive and well-marked crop of purpura; the gums were spongy, and easily made to bleed; and her tongue was coated with a thick fur.

Tincture of larch bark was now commenced, in doses of ten drops, three times daily; after two days increased to fifteen drops, and given more frequently. On the 21st it is reported—"All bleeding has ceased; the tongue is cleansing; the bowels regular; and strength greatly improved."

From this date, under the same treatment, this child's recovery progressed rapidly and most favorably.

For the following cases, in further illustration of this subject, I am indebted to my colleague, Dr. Moore.

Case 3.—July 1st, 1858.—John M,—æt. 2 years, was brought to the Institution for Diseases of Children. He looked a soft, flabby child, and has had a cough for the last six months. On examination, I found a thick crop of purpura studded over his chest, arms, and abdomen; he was languid, with total loss of appetite, and was greatly annoyed with a soft rattling cough. He never passed blood by his bowels. As the child lived in a comparatively unhealthy part of the city, I directed that he should
be at once removed to the country; or, if that was not con-
venient, that he should be kept as much as possible in the park during
the day. I prescribed tincture of larch bark, eight drops to be
given three times a day, in lemonade; which latter beverage,
well sweetened, he was allowed ad libitum during the day and night.
July 3d.—The spots fading; cough still troublesome.
5th.—Purpura scarcely perceptible; the child to leave for the
country. Larch bark discontinued.
I have seen this boy frequently since; he has had no return of
the purpura, and the cough has entirely ceased. His general
appearance is much improved.
Case 4.—Case of Bleeding from the Gums, and general Cachex-
ia.—Matilda M., æt. 5 years, was brought to the Hospital for
Diseases of Children, 15th September last. She looked anæmic
and puny, and for the last few days free bleeding from her gums
had occurred, two or three times, during the day and night. On
examining the state of her mouth, I found the tongue “too red,”
and gums spongy. I prescribed ten drops of the tincture of larch
bark, to be taken in cold lemonade four times during the day;
the girl to have cold lemonade to drink freely; her food to con-
sist of vegetables and fruit.
September 18th.—The bleeding has only occurred once during
the last two days. Continue the larch bark, ten drops three times
a day. Lemonade and vegetable diet as before.
21st.—General improvement in the patient; state of the mouth
and gums much healthier. There has been no return of the
bleeding; however, I thought it advisable to continue the larch
bark a little longer, and prescribed gutt. viij. twice daily, in a
mixture of chlorate of potash. This treatment sufficed to con-
firm the previous amendment.
I looked carefully for petechiae in this case, but could not dis-
cover any.—[Dublin Hospital Gazette.

On Injection in Gonorrhœa. By Professor Sigmund.

Professor Sigmund, of Vienna, as the result of his extensive ob-
servation in this class of diseases, is decidedly in favor of the em-
ployment of injections in the treatment of gonorrhœa. He be-
lieves that those who have derived no benefit from their use, or
who have observed mischievous consequences from this, have in
the great majority of cases, employed them improperly. He has
tried injections with balsam of copaiba, and with chloroform, but
has given them up as unpractical, and those made with the
patient’s own urine, while taking balsam copaiba, were found to
be as inert as water. From among a large number of substances
tried, he confines himself now almost entirely to sulphate and
acetate of zinc or lead, alum, and tannin; and of these he pre-
fers the sulphate of zinc to all others, because the great majority of patients are cured by it; it acts mildly, neither soiling the linen nor changing the color of the urine, and it is very cheap.

For injections to succeed, they must be used at the proper time, in a suitable dose and manner, and they must be continued sufficiently long. The period for their employment has arrived as soon as the inflammation of the mucous membrane of the urethra has become subdued; but they should not be used as long as there is present considerable swelling, great, or even slight, if continuous, pain, spasms, or frequent calls to pass urine. The dose of the material should be small, as five grains to the ounce of extract of lead, one quarter of a grain of nitrate of silver, one grain of sulphate or acetate of zinc, &c. It is seldom necessary to increase the original dose. The addition of anodynes, as opium, hyoscyamus, &c., has no advantageous effect. We should carefully teach the patient how to use the injection; and a small tin syringe, with a conical tube, is to be preferred. It should hold at least two drachms. The patient should be placed in the upright position, and should pass urine prior to the injection being thrown in. The tube must be so passed into the urethra, that no fluid can flow out between the canal and the tube. The fluid is now to be slowly thrown in, and then the mouth of the urethra is to be kept closed by two fingers, so that nothing can pass out during two or three minutes. Two injections are to be thrown in, one after the other, and they are to be repeated three or four times daily. The injections should not be thrown in just before going to sleep, as they then sometimes give rise to seminal discharges. They must be persevered in for eight or ten days, after all traces of diseased secretion have ceased to be visible, even in the morning. The average time required will be from twenty-one to twenty-eight days. Internal means may also, if desired, be employed, and balsamic medicines in many cases hasten the cure.

Dr. Sigmund rarely has recourse to caustic injections, as the nitrate of silver, sulphate of copper, chloride of zinc, &c., because generally the experiment is dangerous. He limits their use to simple, uncomplicated gleet, which has resisted the usual means, as also to recent gonorrhoea without inflammation occurring to persons who have already employed the treatment with advantage.—[Schmidt's Jahrbuch, and Ranking's Abstract.

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_on the Shortness of the Duration of Labor._ By Dr. J. Gray.

In order to increase the action of the uterus, and thereby hasten delivery, Dr. J. Gray advises us to excite the nipple as labor-pain comes on, and continue the stimulation so long as it lasts. This
is accomplished by passing the left hand gently but continuously upwards and downwards over one or other of the nipples; or by stimulating with the fingers the act of sucking of the infant. By such manipulation, he says, the nipple erects, and in virtue of reflex action, the uterine contractions increase in force; while at the same time the os dilates, and the external parts become relaxed. Besides shortening the duration of labor, he finds it has also the effect of preventing hemorrhage. The second stage of labor completed, if the placenta be not in the passage, he still maintains at short intervals the friction over the nipple, in order that the uterus may expel its contents; and also resorts to it in cases where he has occasion to fear "flooding."

"Reasoning," Dr. Gray remarks, "from the practice of ancient and modern times, and influenced especially by the theory of reflex action, as recently discovered and propounded by Marshall Hall, I have lately been led to adopt this mode of irritating the nipple, in order to increase the action of the uterus, with a view to the abridgment of labor. If, I inquired, the application of the child to the breast causes the womb forcibly to contract, and thus prevents 'flooding,' may not a similar operation, artificially performed, have the same effect in promoting the contractile efforts of the uterus, and hastening the delivery? That it does so, very ample trial has fully convinced me. In difficult cases, indeed, which require instrumental aid for their termination, it will most probably prove useless—failure depending upon malformation either on the part of mother or child. But where the child is in the normal position and of average size, and should no deformity exist in the pelvis or soft parts of the mother, I have found it generally successful. I never, however, be it remembered, interfere in those cases where there is already active uterine contraction.

attachment, is seized and drawn out to the extent considered necessary to enlarge the pupil; a piece of fine floss silk, previously tied in a small loop round the canula forceps, is slipped down and carefully tightened around the portion of iris made to prolapse, so as to include and strangulate it. This manoeuvre requires a little practice and dexterity, and is best accomplished by holding each end of the silk with a pair of small forceps with broad extremities, bringing them exactly to the place where the knot is to be tied, and then drawing it moderately tight. A single tie is sufficient; the ends are then cut off, and the operation is complete. Little or no irritation usually follows. The small portion of iris included in the ligature speedily shrinks, leaving the little loop of silk, which may be removed from the eye about the second day. This operation has been performed many times by Mr. Critchet, and by his colleagues, Mr. Bowman and Mr. Poland, and the result has been in every respect most satisfactory; the size, form, and direction of the pupil can be regulated to a nicety; its mobility is preserved, and the eye speedily recovers from the effects of the operation. It is applicable to numerous groups of cases, including all those in which the natural pupil, or even a part of the natural pupil, is moveable, and has a free edge.—[Ophthalmic Hospital Reports, and Ibid.]

On Laryngoscopy. By Dr. Czermak, of Pest.

Under the head of "a contribution to laryngoscopy," Dr. Czermak relates a case of chronic loss of voice, of supposed nervous origin, chiefly because it was often suddenly aggravated by emotional causes; in which, by means of a small laryngeal mirror and an ordinary study lamp, he was enabled distinctly to make out a small dark-colored tumor, of the size of a small green pea, resting, by a tolerably broad base, on the right true vocal chord. The growth had a somewhat uneven surface, and seemed of soft consistency, inasmuch as each vibration of the chord caused its whole substance to tremble, and when closed on by the glottis, it seemed somewhat elastic; the sudden exacerbations of hoarseness, from emotional causes, depended, no doubt, on the more or less erectile character of the growth. Dr. Czermak only saw the patient once in passing, but suggested the propriety of operative interference in such cases, and relates this case chiefly as an encouragement to others to prosecute this method of diagnosis by means of Garcia's laryngeal speculum, recalling, however, the fact that this method of diagnosis dates long previous to Garcia, and referring for proof thereof to Liston's 'Practical Surgery,' London, 1840, p. 417.—[Winer Wochenschr., and Ibid.]

The question here proposed assumes a vast importance, from the fact that in a large number of the experiments upon the ingestion of poisons, made by Orfila and others, the oesophagus was tied to prevent the rejection of the substance employed. Until a recent period, no one seems to have suspected that the mere ligation of the oesophagus could give rise to formidable symptoms and to fatal results, which might be wrongly referred to poisons previously placed in the stomach. In June, 1856, MM. Bouley and Reynal sent to the Academy of Medicine a communication, in which they believed themselves to have demonstrated that ligation of the oesophagus was not the innocuous operation which Orfila believed it to be; that in most cases it was followed by grave symptoms, and that when permanently applied, it was inevitably fatal. The bearing of these statements is clearly this:—Orfila left on record a large number of experiments in which he had placed various substances in the stomachs of dogs, and then tied the oesophagus. If, now, the latter observers are right, and this operation is alone competent to destroy life, nearly all of Orfila's experiments will demand a new and more rigorous scrutiny.

The paper of MM. Bouley and Reynal was referred to a commission, composed of MM. Begin, Bouley, Jobert, Larrey, Renault, and Trousseau, the latter of whom acted as reporter. To the same commission were also referred additional communications on the same subject by M. Orfila, a nephew of the toxicologist, Follin, Sédillot, Colin, Szumowski, and Jobert.

After a patient, experimental criticism of the views of these several observers, the commission arrived at the following conclusions:—

1. Ligature of the oesophagus causes symptoms of a serious nature, which should not be neglected in toxicological studies.

2. These symptoms are more or less grave as the ligature is more or less rightly applied.

3. Permanent ligature of this canal causes death in nine-tenths of the cases.

4. The maximum duration of life, under these circumstances, having been six days, doubt is cast upon the supposed toxicological characters of substances tested by ingestion and subsequent ligature of the oesophagus, when death follows their administration only after the lapse of two, three, four, five, or six days, and with still more reason when it is yet longer delayed.

5. The symptoms which follow the permanent application of a ligature to the oesophagus, are profound prostration, supervening at the close of twenty-four hours.
6. The consecutive lesions are inflammation of the nerves which accompany the oesophagus, with or without purulent formations in the track of the wound, so that where these complications attend the administration of poisons retained in the stomach by ligature of the oesophagus, their supposed effects are to be regarded with suspicion, owing to the impossibility of referring the accidents in question to the supposed poison, or to the means used to retain it in the intestinal cavities.

7. The temporary ligature of the canal is fatal but in three of one hundred cases.

8. It is hence inferred, that when the ligature is to be used, it should be applied without great pressure, and should be removed within six hours.

In commenting upon the report here analyzed, M. Brown-Séquard states that two experiments are needed to make the matter complete—First, to irritate the nerves of the oesophagus, without obstructing that canal; and second, to tie it after cutting the said nerves. To try the first of these, he divided the canal longitudinally, and fixed it in a tube by the aid of two ligatures, so that deglutition and vomiting were still possible. The accident observed by MM. Bouley and Reynal showed themselves in this case, but to a less extent than when the canal was tied without the use of a tube.

In the second experiment, the two recurrent nerves were divided and a ligature placed about the canal near the thorax. In this case, the phenomena recorded by Bouley and Reynal failed to appear! The symptoms observed by these gentlemen were therefore due in all probability to reflex impressions affecting the buccal, pharyngeal, salivary, bronchial, and gastric secretions, and analogous to the flow of tears which follows irritation of the cornea.—[Jour. de Physiologie, and N. Amer. Med. Chir. Rev.

Arnica Montana.

The therapeutical properties of the Leopard's bane is made the subject of an article in the College Journal by Dr. T. C. Miller, and we abstract as follows the observations he has made with it in his own practice. He says:

I have been accustomed to use it for twenty-eight years. In nervous fevers characterized by torpor, this remedy is very valuable to rouse the sinking energy of the nerves, particularly the nerves of the abdominal viscera, while at the same time it increases the contractile power of the muscular fibres, and especially the fibres of the unstriated muscles of the walls of tubes and ducts. It is a very valuable remedy in enteric fever, and where there is colliquative hemorrhages, passive sweatings, and exanthemata of the abdomen. It will not take the place of vale-
rian, quinia, camphor or the acids, for its action on the system is unlike that of either and all of these. These four great remedies have each its own distinctive influence, and each is a valuable aid to the others, when needed.

In inflammations combined with torpidity, as in typhoid pneumonia; in inflammation of the brain and its coverings, in gangrene, and other similar affections, it requires oftimes, camphor, quinia, and perhaps opium, to be given in conjunction with it.

In obstinate maltreated intermitents, with torpidity of the abdominal viscera, and engorgement and enlargement of the spleen and liver, and perhaps abdominal dropsy, and in the so-called typhoid cholera, arnica is of great value. My brother, Lewis E. Miller, uses it in conjunction with ether in those cases.

In old, atonic gout and rheumatism, especially locally applied, it always is of value. In dysentery, where the disease is complicated with torpidity of the bowels, or constipation, exhaustion, or colliquative dysentery, it is peculiarly indicated. In these cases I consider the root preferable to the flowers.

In passive hemorrhage, of a scorbutic character; in discharges from the respiratory or the reproductive organs; in bloody or serous extravasations caused by contusions and hurts, it is the main remedy I depend upon. It is also very valuable in atonic dropsies.

The external use of the flowers, in tincture or infusion, is the best agent I have tried in acute hydrocephalus.

In paralysis, particularly where the paralysis has been caused by mechanical influence upon the brain or spinal marrow, but the nerve structure remains in-tact—not by congestion or softening of the nerve structure—and in the commencement of amaurosis, it has always proved of utility. Theilmann, in treating amaurosis, made use of an infusion of three drachms of the flowers to eight ounces of water, and gave a large spoonful at a dose, once in three hours.

In enlargement, torpidity, or engorgement of any of the abdominal viscera; and also in suppression of the menstrual, lochial, or hemorrhoidal discharges in consequence of torpidity, its use is of great value. Leidbeck speaks very favorably of it in varicose veins of pregnant women. I have derived great benefit from it in such cases.—[Peninsular Independent.

On the Natural Constants of the Healthy Urine of Man. By the Rev. Samuel Haughton, F. R. S., F. T. C. D.

Having already given an abstract of that portion of the above paper which treats of urea, we now proceed to do the same with respect to parts two and three, relating to uric and phosphoric acids:
"I believe that both uric and hippuric acids are accidental in healthy urine, though the former is always found in small quantity; the latter, hippuric acid, occurred to me only once, though it was carefully sought in each case. When I say that uric acid is accidental in healthy urine, I do not mean to say that it occurs like chlorine and sulphuric acid, the quantity of which depends directly on the chloride of sodium, and sulphate of alumina and potash consumed with the food; but I do mean, that no uric acid whatever, should occur in the urine of a man in perfect health, but that all the nitrogen of the urine should pass off in the form of urea, a more highly oxidated product than uric acid."

The quantities of uric acid excreted daily, according to the varying statements of eminent chemists, amount to from five to eighteen grains. In Mr. Haughton's tables, the quantity differs greatly in different individuals, ranging from 0.71 to 11.88 grains in "beef-eaters," and from 0.50 to 2.48 grains in vegetarians; the mean in the former class is 4.55 grains, in the latter 1.48 grains daily.

"When we consider that the quantity of urea passed by the persons considered in these tables per day, is 5.76 grains, and 5.94 grains, respectively, we may fairly consider the uric acid discharged simply in the light of a minute fraction of nitrogen, which has escaped complete oxidation, and as a matter rather of chemical than physiological interest."

Liebig sets down the average daily discharge of hippuric acid at 7.5 grains—a statement quite at variance with that of Mr. Haughton, who found it only in one case, that of a vegetarian, whose urine had "a remarkable smell, compounded of that of sweet hay and apple-juice."

"There is no subject respecting which more difference of opinion exists, than with reference to phosphoric acid eliminated by the kidneys; some investigators considering that it is as accidental in its character, and as dependent on food, as chlorine or sulphuric acid; while others regard it as the direct product of the disintegration of nervous tissue, and, as such, entitled to our regard as the measure of nervous work done by the system. In whatever point of view it is to be considered, it is obviously important to determine its daily amount in the case of healthy men, under different conditions as to food and work of mind and body."

The average quantity of phosphoric acid discharged per day was found to be, in beef-eaters (6 in number,) 37.07 grains; in vegetarians (5 in number,) 26.70 grains; and in the former probably, and certainly in the latter, the proportion of the acid combined with alkalies was to that combined with earths in the ratio of 4 to 1.—[Dublin Medical Press.]
On a new mode of treating severe Dyspepsia and Chronic inflammation of the Stomach. By Alexander Fleming, M. D., Senior Physician to the Queen’s Hospital, Birmingham.

"In the medicinal treatment of affections of the stomach, I have long been convinced of the great importance of acting directly on the gastric mucous membrane. That, in fact, local treatment is here nearly as valuable as it is in affections of other mucous surfaces, as the eye, pharynx, vagina, and urethra. Hygienic rules and the management of the food are, for obvious reasons, very important in affections of the stomach, and will often cure mild cases without the help of medicine; but I am satisfied that, in the more severe and obstinate forms of chronic gastritis, the local medicinal treatment of the diseased mucous membrane has been unduly neglected—and that it contributes very powerfully to promote the cure.

"Of the several medicines which I have employed with a view to their local action on the stomach, my experience gives the first place to nitrate of silver; and the observations I have now to make apply to this remedy. It is often given in pill. If this be made with bread-crumble, the chloride of sodium in the bread converts the nitrate into the insoluble and comparatively inert chloride of silver. If made with gum or starch, the pill, on reaching the stomach, causes quickly the secretion of gastric juice, the chloride of sodium and muriatic acid of which again render the nitrate inert. It can have very little local action in the form of pill. I have for many years, therefore, given the crystalized nitrate dissolved in distilled water, in the proportion of from half a grain to four grains to the half ounce. The dose is taken at bedtime on an empty stomach, and is repeated every night, every second, third, or fourth night, according to the severity of the disease. The stomach should be strictly empty—the patient recumbent—and he should be made to roll about immediately after taking the medicine. It is thus, before it suffers decomposition, brought into contact pretty freely with the mucous membrane, and gives, at the time and subsequently, evidence of its local action. In many cases, this mode of using the remedy suffices, in conjunction with other means, to effect a cure.

"But this method of exhibiting the medicine is not equal to the cure of some of the severer forms of dyspepsia and chronic gastritis; and in these I have, for the last four years, endeavor to act more generally and efficiently on the mucous surface by injecting the solution into the stomach. I employ a strong brass syringe and flexible tube, one-eighth of an inch in bore, the grasric end of which has a number of holes so directed that
the fluid is thrown in a circular shower outwards and upwards on the walls of the stomach. The injection is made by dissolving from one to four grains of the nitrate in three ounces of distilled water. The operation is for the most part managed easily. Sometimes it causes nausea and retching—oftener not. It excites at first an enduring and grateful sense of coolness in the stomach, and subsequently there are felt pricking and sharp painful sensations, but of a different nature from the pains of the disease. Sometimes one injection is enough, but I have more frequently had to repeat it two, three, or more times.

"During the employment of the injections the patient takes, three times a day and before food, a little morphia or chloric ether, or Indian hemp, in plain or cinnamon water. He is confined to small and frequent meals of milk, and as he gets better this is thickened with arrowroot or tapioca, and he is very gradually introduced to a nourishing and easily digestible diet. Counter-irritation to the epigastrium, nitrate of bismuth, oxide of silver, gentle tonics, &c., are employed when indicated.

"Of the thorough efficiency of this mode of acting on the mucous surface of the stomach, and of its power in promoting the cure, my experience, so far as it goes, is very decided. Although it is now four years since I first tried injection, I have not used it in more than ten cases. I have always in the first instance, employed the simpler method already described, and resorted to injection only as a last resource; but its greater efficiency would, I feel certain, justify its employment in many of the less severe cases, and give more thorough and speedy cures. It is not my purpose, at present, to consider the intimate nature of the mode of cure, or the manner in which the nitrate of silver substitutes healthy for diseased action in the inflamed gastric membrane. I must reserve that interesting question, and the detailed narrative of cases, for another opportunity.—[Med. Times and Gaz.

On the Question of the Affinity between Scarlet Fever and Measles.

By Dr. Kuttner, of Dresden.

That measles and scarlatina, in their symptoms and in their essence, present two well-defined states of disease, is one of the most indisputable facts in pathology. Schönlein, making use of an analogy derived from botanical science, looks on measles as a peculiar exanthematic form of catarrh, and accordingly places it in the family of the catarrhs; whereas scarlatina is placed by him in the group of erysipelatous diseases. Admitting that, in the regular course, such sharply defined examples of the diseases exist, Dr. Kuttner observes, that experience furnishes us with androgynous cases calculated to embarrass even the expe-
rienced "diagnostiker." If the diseases were always so well marked as we find them in the handbooks, there would be no difficulty. Sometimes the exanthem bears the character of scarlatina, while the catarrhal irritation of the bronchial membrane, and of the mucous membrane of the nose and of the eyes, indicate the morbillous process; or, on the other hand, the rash of measles is accompanied by vomiting, by a sharp attack of angina, and by the characteristic scarlatina tongue.

We see occasionally, in the same individual, parts of the skin presenting the scarlet-red eruption, while in others the rosy rash of measles exists. We have, then, not merely examples of transition, but we see cases which may be termed hybridous. If we were even disinclined to assign any relationship to the two diseases, arising from the fact of their passing into each other, there is still another observation which shows it in a higher degree—namely, that the same contagious matter appears capable of producing, in different individuals, different diseases; in some measles, in others scarlatina. Many reliable proofs of this are to be found in medical literature, to which the following may be added, as affording good examples: During an epidemic of measles, a boy of sixteen years of age became afflicted with the disease, which ran a favorable course, and at the end of three weeks he was sent from Dresden to his father's country house, at some distance from the city. A little sister, two years of age, who visited the brother on the day of the appearance of the rash, although immediately sent away, sickened on the tenth day, presenting the ordinary symptoms of the eruptive fever; in her, too, the disease passed over mildly. A second sister, one of the older members of the family, who had before repeatedly attended upon persons in measles without taking the disease, did not now escape. There yet remained a third sister, who was married, and who had been for fourteen days on a visit to her father's house, but who, from never having had measles, carefully avoided intercourse with the sick and the convalescent, not, however, guarding against the possibility of transmission through a third person. Without any previous indisposition, sharp febrile symptoms appeared in this case, leading to the belief of the invasion of measles. An intense scarlatinal eruption, however, manifested itself, with the characteristic affection of the throat, and with the red-tongue. The exanthematic period passed over without any remarkable symptoms, ending in the second week with an extensive exfoliation of the epidermis. No second case of measles or scarlatina occurred in the house.

Although observations such as these have been made by practical physicians, and recorded, still this is worthy of notice,
from the concurrent circumstances, and because the course of
the disease was so characteristic as to leave no doubt as to the
correctness of the diagnosis.

In what relation scarlatina and measles stand to each other,
and whether the same contagion can, in reality, produce both
forms of disease, we are scarcely in a position to determine. A
sceptic will naturally say that the scarlatina of the last named
case was not the product of the contagion of measles, but was
developed independently.

Admitting, however, that a direct proof to the contrary can-
not be given, the fact nevertheless remains, and no communi-
cation from without, capable of conveying scarlatina, took place.
Is it in reality so preposterous a notion, that the matter of the
exanthematic contagion may act like a ferment, without any
specific character, and according to individual disposition, may
produce measles in one case, and scarlatina in another, as, under
similar conditions, the impression of cold may cause in one in-
dividual catarrh, and in another rheumatism?—[Jour. für Kin-
derkrankh, and Ranking's Abstract.

On the Physiology and Pathology of the Nervous System. By Dr.
Brown-Sequard.

The principal points which Dr. Brown-Séquard endeavors to
establish in connection with the physiology and pathology of
the central nervous system are these:

1st. Excitations of the anterior roots of the spinal nerves may
be a cause of pain, because these roots, being motor, produce a
cramp. The pain due to this cramp is what has been errone-
ously called recurring sensibility. Cramps, and several other
kinds of painful spasms (of the uterus during parturition, of the
sphincter ani in certain cases, &c.,) are painful on account of a
galvanic irritation of sensitive nerves accompanying muscular
contractions.

2d. Our movements seem to be guided by the peculiar sensa-
tions we derive from the galvanic irritation of certain sensitive
nerves of muscles, while they contract.

3d. The power of transmitting sensitive impressions exists in
many parts, which are not able to give pain or any other sen-
sation, when they are excited by our usual means of irritation;
so it is with the gray matter of the spinal cord, and with many
parts of nerves, which, however, are conductors of sensitive im-
pressions.

4th. Hyperæsthesia is a constant result of certain injuries
upon, or alterations of, the posterior parts of the cerebro-spinal
axis, from the tubercula quadrigemina down to the lower end
of the spinal cord.
5th. The transmission of sensitive impressions, in the spinal cord, takes place chiefly through the gray matter, and partly through the anterior columns; but, before reaching the gray matter, the impressions, in a certain measure, pass through the posterior columns.

6th. The conductors of sensitive impressions from the trunk and limbs, decussate in the spinal cord, and not in the encephalon, as was universally admitted.

7th. Although the spinal cord is greatly altered or injured, sensibility, more or less diminished, may persist everywhere, on account of a peculiar arrangement of the conductors of sensitive impressions.

8th. The various kinds of sensitive impressions seem to be conducted by quite distinct nerve-fibres, in the nerves and in the nervous centres, and the place of passage of some of these conductors in the spinal cord, seems not to be the same as that of the others, but none of them go up to the sensorium along the posterior columns.

9th. In the upper part of the cervical region of the spinal cord, near the medulla oblongata, most of the conductors of the orders of the will to muscles are in the lateral columns, and in the gray matter between these and the anterior columns.

10th. The voluntary motor conductors decussate at the lower part of the oblong medulla, and not all along the median line of the base of the encephalon.

11th. The posterior columns of the spinal cord have a great share in reflex movements, and this is the principal cause of the peculiar kind of paralysis so often observed in cases of alteration of these columns.

12th. The effects of excitation of the vaso-motor nerves, consist essentially in a contraction of bloodvessels, which is followed by a diminution in the quantity of blood, in the temperature, and in the activity of nutrition. The effects of interruption of continuity of the vaso-motor nerves, (i.e. their paralysis) consist essentially in a paralytic dilatation of bloodvessels, which is followed by a greater afflux of blood, an increase of temperature, and a greater activity of nutrition.

13th. As a great many vaso-motor nerve-fibres go up to the brain, and to the cerebellum along the spinal cord, the medulla oblongata and the pons Varolii, the diseases or injuries of the various parts of the cerebro-spinal axis, besides symptoms concerning sensibility and movement, present symptoms depending upon irritation, or paralysis of vaso-motor nerves; contraction or relaxation of bloodvessels, diminution or augmentation in the quantity of blood, increase or diminution of temperature, alterations of nutrition, of secretions, &c.

14th. Besides the influence of the nervous system upon nutri-
tion, absorption, and secretion, through the vaso-motor nerves, there is another which seems to consist in changes in the elements of the tissues—changes producing various modifications in the quantity of blood attracted, and in the interchange of materials between the blood and the tissues.

15th. The absence of the influence of the nervous system on any part of the body, is hardly a cause of other alterations of nutrition than atrophy, while the irritation of the nervous system, is a most powerful direct or reflex cause of a great many morbid changes in nutrition, secretion, &c.

16th. The sympathetic normal and morbid changes of nutrition, secretion, &c., are reflex phenomena, the study of which shows how many diseases are produced by a reflex action, and how a rational mode of treatment might be arrived at.

17th. The loss of consciousness in simple vertigo or in complete attacks of epilepsy does not depend upon a disease of the brain, but upon a contraction of the bloodvessels of the cerebral lobes—contraction due to some irritation of the vaso-motor nerves of these vessels, either by some direct cause irritating them in the base of the encephalon or the spinal cord, or by a reflex influence.

18th. Much more frequently than has been imagined, all the following affections may be produced by a peculiar kind of irritation starting from almost any centripetal part of the nervous system: epilepsy, the various forms of insanity, chorea, catalepsy, hysteria, tetanus, hydrophobia, &c.

19th. The medulla oblongata is neither the only nor an essential nervous centre for the respiratory movements.

20th. There are a great many nerve-fibres and nerve-cells in the medulla oblongata, the pons Varolii, and the other parts of the base of the encephalon, which are not employed in the transmission of sensitive impressions or of the orders of the will to muscles, and are endowed with the singular property of producing, after even a slight irritation, a persistent spasm in certain muscles, and especially in the neck. Rotatory convulsions very often depend chiefly upon the production of such spasms, and of changes in the bloodvessels of certain parts of the encephalon.

21st. The irritation of the auditory nerve may cause rotary or simple clonic convulsions.

22d. The conductors of the orders of the will to muscles, of the sensitive impressions, and of the nervous influences to bloodvessels, decussating at different places in the cerebro-spinal axis, various symptoms are to be observed, depending upon either the irritation or the paralysis of these three kinds of conductors, according to the part of a lateral half of the cerebro-spinal axis where an alteration exists.—[London Lancet.]
Hysteria considered as a connecting link between Mental and Bodily Disease. By Dr. W. Camps.

Dr. Camps's object is to draw attention to such forms of hysteria as present marked evidence of psychical, in addition to, or complication with, somatic affection. Until within a comparatively recent date it has been the custom to consider mental disease as unconnected with or independent of bodily disease. But insanity is far more a bodily disease than has hitherto been considered; and in cases of this malady there is mostly, if not always, impairment of the proper healthy cerebral structure.

Dr. Camps gives a brief account of the hysterical paroxysm, which is almost, though not exclusively, confined to the female sex. It is, however, in the moral state and motives, which not unfrequently attend or accompany the severer forms of hysteria, that we may recognise without difficulty the approximation of this disease to some of the forms of mental disease. In severe cases of hysteria, amidst considerable general disorder, the nervous system being chiefly involved, the proper functions of the brain often become deeply affected. There is observed in such an increased susceptibility to impressions, a great rapidity of movements, together with a capriciousness of motives; the countenance indicates the alterations that take place in the feelings of the patient; and in the worst cases, the most amiable sentiments are observed to be converted into the most unamiable and repulsive. In some, there appears to be, at times, a complete metamorphosis of the whole moral character. This state of the disease becomes a subject of the deepest importance, more especially in regard to its moral treatment, so far as regards the imposition of personal restraint, or confinement of the patient; for nothing would be more injurious to a hysterical patient in this condition than undue interference with personal liberty. The functional activity of the spinal chord, as well as of the brain, may be morbidly diminished, or augmented, or perverted; and this latter state is especially the condition in hysteria. The perversion of the functional activity of the spinal cord is most marked in some cases, in which there is an extreme irritability of the cord at least, if not of the entire cerebro-spinal axis; and in the severer forms of the disease there doubtless exists an excessive irritability of the whole nervous centres; and it may be, of the entire nervous system, including even the nerves themselves. It might be assumed that the irregular, convulsive, and impulsive actions of hysterical patients, depend rather upon some state of the blood, which alters its healthy relation to the nervous tissue, than upon any structural alteration of the proper nervous tissue itself.

During the last nine months, Dr. Camps has had under his
care a somewhat severe and remarkable case of hysteria, which, he thinks is one that afforded him good reasons to conclude that it, and similar cases, present phenomena that clearly show a connection between mental and bodily disease. The subject of this affection was a lady, above fifty years of age, of a highly nervous temperament, who first came under his notice, presenting many of the ordinary characters of hysteria; but as the disease gradually developed itself, this patient presented, in addition, many of the characters of a very protracted and aggravated case of this disease. There were paroxysms of choreic movements; at first chiefly confined to the lower extremities, and to the left side of the trunk; these gradually affected, in a slighter degree, the upper extremities; being attended then with considerable paroxysmic palpitation of the heart, and heavy, labored respiration. Then supervened excessive restlessness of the body generally, so that when out of bed, the patient was almost always in bodily action, seldom or never sitting, frequently not even when at meals; in motion whilst standing, and very frequently walking hurriedly about in various apartments of the house. This was followed by, and accompanied with, excessive talkativeness, so as to fatigue her companions. When remonstrated with, and requested to be silent, her reply was, "I must talk, for I cannot help it." The subject of her conversation was, almost invariably, herself, and her peculiar ailment and condition, and this ultimately assumed the form of intense selfishness or egotism. There was no derangement of the special senses, nor of the general cuticular sensation. The disease appeared to ascend gradually higher along the cerebrospinal axis, and at length to reach the sensory ganglia, and the cerebrum itself; for certain psychical phenomena presented themselves at times, bearing the closest affinity to those exhibited in some forms of mental disease. Commonly, the patient slept well during the earlier part of the night, and seldom or never complained of pain in any part of the frame. The faculties of perception and memory were unimpaired, as was the judgment also in relation to all matters of business demanding close attention; the imagination was in too lively exercise at times, but the will appeared to have lost its controlling power over the current of the thoughts. The patient would frequently remark, "My thoughts master me; I cannot help thinking about myself; I seem at times to have lost the power to think of anything, or of anybody, beside myself." Frequently, but not always, there was great irritability of temper; and this would sometimes be expressed in words, and sometimes in actions. The will having lost its controlling power, the impulses arising from this state of excessive emotional sensibility were occasionally expressed in very irregular and extraordinary phrases and actions of the body.
The view the author takes of this case was, that it is mainly connected with the cessation of the menstrual function. Moreover, in this case, there was excessive irritation, possibly congestion, of the greater part of the cerebro-spinal axis, including at least the sensory ganglia at the base of the brain—a condition of parts sufficient to account for most if not for all the symptoms connected with the nervous system.

Dr. Camps concludes by a brief reference to the treatment of hysteria. The measures recommended are: 1. The use of such agents as improve the general health, and especially the general state of nutrition of the nervous tissue; 2. Of such agents as remove the exciting causes of the paroxysms; and lastly, of all such agents as are likely to act beneficially upon the mental state and condition of the patient.—[British Med. Jour., and Ranking's Abstract.

On the Delivery of the Child by Turning as a general rule in Labor. By Mr. E. Garland Figg, of Borrowstowness.

In this paper Mr. Figg attempts to show, not only that delivery by turning is preferable to delivery by the forceps in cases requiring operative interference, but that turning is the rule to be adopted in general cases. He tells us that he has attended sixty labors since writing these papers, that only three of these were conducted as head presentations, and that of the remainder, two were breech presentations, and fifty-five deliveries by turning. As the results of this astonishing practice we leave Mr. Figg to speak for himself:

"With regard to the children, they are generally still from two to five minutes, and in some cases half an hour's duration. In many instances the first arm brought down is a little painful when moved for a day or two. I confess with humility that I have even broken four arms, which, though they occurred in cases of great pelvic contraction, were attributable to my own mismanagement in pressing over the shaft of the os humeri instead of following its line to the elbow. Should you commit the same error, with similar result, be not too candid to the relatives, but at once by your own dictum transubstantiate the injury into a slight sprain received by the infant striking its shoulder against the backbone of the mother while actively prosecuting his uterine gambols. It will pass current, more especially if you appeal to her experience, when it is sure to be corroborated by a quotation of the day and hour of the occurrence. Two slips of pasteboard applied, with a strip of calico a yard long, remedies the evil in ten days.

"In establishing a comparison between the advantages deri-
vable from turning in primiparæ and multiparæ, I believe there is a preponderance of argument in favor of the former. In a primipara the os uteri is more in the axis of the pelvic brim, the body of the organ being more inclined to the perpendicular, and not projecting anteriorly, as in the frequent parturient; hence, in the former case, the uterine efforts of the last month previously to labor lodge the os and cervix inclusive of the head low in the cavity of the pelvis, not only assuring the practitioner by tangible proof of the perfect capacity of the brim, but also presenting the best arrangement for the co-operation of the uterus with his extractive efforts. In the latter case, from the yielding of the abdominal muscles in former labors, the fundus bearing forwards, throws the os in the direction of the spine, rather than the pelvic cavity. Hence until the contraction of these muscles in some measure restore the proper axis, no advance can take place.

"The advantage in the second particular is briefly explained, by stating that in a primipara the antagonistic force is directly in line with the extractive. In a multipara it is entrenched round a corner.

"Again, in a primiparal case you have good grounds for the conviction that, in obviating the perineal stage, you limit the labor considerably; while in the latter patient an hours suffering might conclude the case.

"Be they right or wrong, these are the sentiments which have guided my conduct in a large majority of my cases latterly, experience appearing to justify in happy results what theory dictated on sound reasoning. I hope I shall soon lose all mental impressions of a head lingering on the perineum, or stationary from failing pains for hours. My primiparal patients are up in four day, without swelling of the vaginal muscles, nymphæ, or labia; and what to me is perfectly unaccountable, with very slight laceration of the perinimum.

"I have had but one maternal death where the infant was turned, and that occurred five days after the event, by inflammation of the peritoneum of a patient, who with contracted pelvis, had submitted to the ordeal to produce her sixth full-timed dead child.

"If I be entitled to any credit at all, it is for the candid avowal of a practice, that some, under fear of professional censure, would have adhered to but concealed.

"The operation was ancient, but nearly obsolete, and its revival by Dr. Simpson in particular circumstances led to my adoption of it in general cases."

In a latter communication, written chiefly as an answer to the strong objections of Drs. Robt. Lee, Ramsbotham, and Oldham, are the following passages: "Permit me," says Mr. Figg,
“with humility to observe, that while physiology, anatomy, and analogy enables me to conçoct as rational a theory for the operation as they can against it, I bring forward a formidable ally to my cause in nearly eighty-seven consecutive cases of perfect convalescence in mother and child, without adverting to a still greater number of successful instances effected at various intervals antecedently. Do these gentlemen impugn my veracity? Let them depute any member of the profession resident either in Edinburgh, Glasgow, or London, to visit the locality of my residence, and by impartial inquiry of my patients prove its immunity from danger and their satisfaction as to its adoption.” And again: “While my deliveries average two per week, I have had but one death during the year—the second child of a woman aged 45, born to a second husband after a widowhood of fourteen years.”—[Med. Times and Gaz.

On the Supposed Antagonism of Ague and Consumption. By Dr. Peacock, Assistant Physician to St. Thomas’s Hospital.

After a careful statistical investigation, Dr. Peacock concludes that the information elicited in this manner is only negative. He then inquires whether clinical observation is capable of yielding more positive results, and after relating six cases, he proceeds to say:—

“The facts which I have now detailed, conclusively show that neither does the existence of consumption prevent the occurrence of ague, nor the occurrence of ague preclude the subsequent development of consumption; but they do not prove that the supposed antagonism may not, in some degree, exist. For, on the one hand, phthisical patients, subjected to the influence of malaria, may take ague in less proportion than healthy persons similarly exposed; and on the other hand, persons who have had ague may be less liable to consumption than those who have not had the disease. These objections I have no means of meeting; but when it is considered that, within a period of two years, five cases of the co-existence of the two diseases have fallen under my own notice, at one public institution, where the majority of phthisical patients do not come from malarious districts, the coincidence cannot be regarded as exceptional or rare.* I cannot, then, but conclude, that it is not probable any material antagonism exists between phthisis and in-

* During the two years in which these five cases occurred, Dr. Peacock treated, at St. Thomas’s Hospital, among the in and out patients, 236 cases of ague, and at least 262 cases of phthisis. The precise number of cases of the latter disease he cannot give, as some cases of phthisis are entered in the out-patients’ book as “affectations of the chest.” He has also met with several other cases in which there was reason to suspect tendency to phthisis in aguish patients.
termittent fever. The facts do not, however, warrant the denial of the supposition altogether, and there are probably few popular ideas which have not some foundation in truth.

"The correct inference would appear to be, that the influence, if any, exerted on the prevalence of consumption, by a malarious atmosphere or by ague, is far less important than that of various other causes which affect the development of that disease. The practical conclusion also to be arrived at is, that as phthisical patients may take ague, and as such complication materially aggravates the original disease, we should, in selecting residences for consumptive patients, avoid those situations which are marshy, or in which aguish affections are known to prevail."—[Med. Chir. Review.

On the employment of Oil of Turpentine and Opium in large doses, in severe Puerperal Diseases. By Dr. E. Bonfils.

M. Trousseau has lately employed, with considerable success, a method of treatment proposed originally by Dr. Graves, in puerperal diseases. This treatment consists in giving opium and oil of turpentine in large doses to women in child-bed who are attacked with metro-ovaritis, peritonitis, uterine phlebitis, &c. Among other cases, M. Trousseau has treated in this manner, and with success, a woman attacked with peritonitis and double pleuro-pneumonia. He also employed this plan in another case of a woman attacked with general and very severe peritonitis, which was very rapidly checked and afterwards cured; but although the cure appeared to be permanent, the patient was unfortunately seized with hectic symptoms of an insidious character, and sunk under what appeared to be a putrid infection. In the first case the opium was prescribed in pills and the turpentine in injections. At first five centigrams (about one grain) of opium were given in five pills, to be taken daily; then the dose was gradually augmented till it reached about two grains a day. The opium was continued for thirteen days. The turpentine was administered at first in the dose of ten grammes (about two drachms and a half,) in two clysters, one in the morning and the other in the evening; then the quantity was progressively augmented to thirty grammes (about seven drachms and a half.) In the second case the opium was also given in pills, in the dose of five centigrams (about one grain) for three days. The oil of turpentine was administered by the mouth in capsules, each containing one gramme (about the fourth of a drachm) of turpentine; six of these capsules were taken every day, and they were continued for six days.—[Bull. Gen. de Therap, and Ranking's Abstract.

These not unfrequently occur, however carefully and adroitly catheterism may have been performed. Usually, they are not to be predicted, although they are more frequently met with in certain diatheses, and during old chronic affections, which also add much to their gravity and importance. The size of the instrument or nature of the operation do not seem to exert any effect in their production; nor do nervous and pusillanimous subjects seem to be more liable to them; but the seat of the affection appears to have considerable influence, as they much more frequently occur when this is near the neck of the bladder or beyond the bulb. The explanation of the exemption of women from these accidents by the ease with which catheterism is performed on them, seems contradicted by the fact that they sometimes, in men, follow catheterism when performed with the greatest ease, and at others are not produced by the most violent manoeuvres.

Passing by those of the accidents which are of a local character, such as hemorrhage, retention, etc., M. Phillips confines his attention to the general accidents, which may be divided into three categories: 1. They are manifested under the form of simple febrile paroxysms, unattended with complications. 2. The febrile accident is complicated by some disease, especially of the urinary organs, and particularly of the kidney. From simple intermittent it becomes a remittent affection, and only temporarily yields to quinine. In the 3rd, the febrile paroxysms are more or less rapidly followed by the production of plegmonous inflammations and suppurative arthrites. In the simplest form, the febrile paroxysm much resembles that of ague, except that it is determined by the catheterism, and is less regular in its recurrence. Whether confined to the simple febrile paroxysm complicated with disease of the urinary organs, or accompanied by abscess, the paroxysms may assume the quotidian or double tertian type. The continued remittent type is oftenest met with when there is prior disease or abscess. Under these circumstances, too, the pernicious condition may ensue, or it may at once arise in the aged or enfeebled.

Simple Febrile Paroxysms.—Sometimes these disappear promptly of their own accord; but at others, they are more persistent, or may even assume the pernicious form. Under all circumstances, however, they yield to the action of quinine.

Febrile Paroxysms Complicated with Diseases of the Urinary Organs.—When disease of these exists, febrile paroxysms are easily induced, although in the case of their being slight, they may sometimes yield, like the simple ones, to quinine. In
On the Accidents Produced by Catheterism.

[October,

other cases the fever is converted into an obstinate continued remittent. When the disease of the urinary organs is more serious, this type, or the pernicious form of fever, may be at once developed.

Production of Pus in the Joints.—M. Velpeau first described this as one of the accidents supervening upon catheterism. In certain of the patients suffering from disease of the urinary organs, a considerable effusion takes place in one or more of the joints. They rapidly increase in size, and become red, hot, and very painful; and the danger is then very great. The pus which forms is very fluid and very fetid, resembling that of urinary abscess.

Diagnosis and Prognosis.—The really important question to decide is, whether the febrile paroxysm supervening upon catheterism have aroused or revived a nephritis,—of all complications in these cases the one to be most dreaded. Determined in the affirmative, we have then to ascertain how far this complication may have placed the case beyond our aid. If after one or two paroxysms, there being constant renal pain, the skin is found harsh and dry, the pulse rapid and full, and above all, if the tongue which is always dry and sometimes cold, becomes covered with a blackish coating, the worst issue is to be expected. When the fever is followed by plegmonous inflammation or arthritis, we may at first confound the disease with an attack of rheumatism, gout, or gonorrhœal arthritis. The rapid progress of the disease to suppuration helps to elucidate its nature.

Nature of the Disease.—Velpeau advanced the hypothesis that admission of some of the principles of the urine into the blood, owing to defective elimination of these, was the origin of the symptoms witnessed; and the researches of Claude Bernard upon the varying colour of the renal blood, seem to confirm this view. The urinary odour of the abscesses, even when remote from the possibility of infiltration, has often been remarked. Phlebitis may also give rise to these accidents; but then either a purulent collection existed already, or the passage of the instrument has given rise to the formation of one, and then the patient dies in consequence of purulent resorption.

Treatment.—Experience has shown that preventive treatment is often quite efficacious, and even when not so, remarkably diminishes the severity of the subsequent attack. It consists in administering quinine for four or five days prior to the catheterism, giving six grains per diem in the young and robust, and double the quantity in the aged and enfeebled. When the intermittent paroxysms are quite simple, expectative treatment usually suffices; but when they persist or assume worse types, large doses of quinine, as fifteen to thirty grains, should be given daily. In the case of disease of the kidney, it must be
remembered that the quinine is only a palliative, and that the nephritis calls for our greatest attention.—*Bulletin de Thérapeutique*, tome lv. pp. 203—216.

[Dr. Wolff, in the *Berlin Med. Zeitung*, 1858, No. 42, relates an interesting case, in which the patient was carried off amidst febrile symptoms sixty hours after the introduction of the catheter. Dr. Heyfelder, of St. Petersburg, also reports two cases in the *Deutsche Klinik*, 1857, No. 35, in one of which the patient died in twenty-four, and in the other in forty hours afterwards.]  

*[Medical Times and Gazette.]*

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The efficacy of the extract of belladonna in the treatment of that hitherto most intractable disorder, incontinence of urine, has been so abundantly proved by the concurrent testimony of numerous authors during the past two years, that it may now be considered as one of the established facts of medical science. It has already led to an investigation into the action of this remedy in several kindred affections, and induced me some time ago to give it a fair trial in a most severe and protracted case of irritable bladder. The causes of this painful disorder have met with so clear an exposition at the hands of my friend, Mr. Gant, in his recent able volume upon the subject, as to render any further inquiry upon the present occasion unnecessary; but I may be permitted to add my testimony to that of all other physicians who have directed their attention to the subject, to the increasing frequency of the malady, especially amongst the wealthier classes of society. Indeed it seems to advance pari passu, with the spread of refinement and civilization, and their too frequent attendants—enervating and luxurios habits. The success of the treatment in the case referred to was so striking as to induce me to put it on record, that its efficacy may be tested by other experimenters; especially as, since its discontinuance, now more than six months ago, there has not been any tendency to relapse.

The patient was a married lady, without family, about thirty years of age. Some five or six years ago she had suffered from acute dyspepsia, but shower-baths and horse exercise had completely cured her, and she had enjoyed uninterrupted good health until about two years ago, when she was suddenly, and without any assignable cause, attacked by the complaint for which she first consulted me in August, 1858. Previously to its commencement, which was in May, 1857, she had always slept
remarkably well, and had seldom or never been disturbed during the night; but during the last fifteen months, the irritability of the bladder had been so great as to render the immediate evacuation of its contents imperative at least three or four times during the night, and often as frequently as seven or eight times, or even more. During the day there was little or no irritability, and the quantity of urine passed was normal, or nearly so; but in the course of the night, two or three times the natural amount was passed, pale, insipid, and when tested, free from sugar, albumen or other abnormal constituents. The combined effects of the loss of rest and the drain of fluid from the system had materially affected her general health. She had lost flesh, and suffered much from thirst, headache, and nausea, especially upon rising in the morning. She was much depressed in spirits, and took a desponding view as to the ultimate result of the malady. I prescribed successively the tincture of the sesquichloride of iron, compound tincture of valerian, tincture of hyoscyamus, liquor potassae, diluted mineral acids, sea-bathing, and change of air and scene, without the least amelioration of the symptoms; and upon her return to town at the commencement of October, I decided upon giving the extract of belladonna a trial. She began taking it in doses of the twelfth of a grain three times a day, in the form of a pill, and was at this period always disturbed four or five times in the course of the night, and often much more frequently. The belladonna was at once increased to a third of a grain three times a day, or a grain in all, as soon as I found that its use was not forbidden by any peculiarity of constitution. These doses were continued for about six weeks, (with the occasional intermission of a day or two,) at the expiration of which period its toxic effects began to manifest themselves; for though the pupils were not dilated, yet vision was not normal; black spectra appeared; the mouth and fauces were parched and dry, and there was occasional nausea. Already the improvement in the symptoms was decided; my patient slept better, and was never disturbed more than three times in the night.

As it is a recognised fact, that in order to obtain the full amount of benefit from the belladonna, it must be pushed until its specific symptoms are quite established, I now increased the daily amount taken to a grain and a half, in the proportions of half a grain in the morning, and one grain at nine P. M. In the course of three or four days, the pupils became dilated, the nausea extreme, and there were repeated efforts to vomit, for the most part ineffectual, but occasionally followed by a little glairy mucus. The irritability of the bladder became almost entirely subdued; she was disturbed once only, or at most twice, throughout the night, and the quantity of urine passed was normal, or
only occasionally slightly increased. The belladonna was at once discontinued, the general health rapidly improved, and during the past six months the cure has been permanent, and my patient has continued perfectly free from any recurrence of her distressing complaint, except that a slight tendency to irritability of the bladder manifests itself now and then, for one or at most two nights in succession, but passes away of itself, and is not of sufficient consequence to require any treatment.—[Norfolk Crescent, and London Lancet.

Different Modes of Performing Lithotomy in the English Hospitals.

A large majority of English Surgeons employ the ordinary lateral method of lithotomy on a curved staff. There has been, however, a considerable disposition to endeavor to improve on it of late years. The median plan, so strongly recommended by Mr. Allarton, has been tried by not a few London Surgeons, and amongst provincial ones has found a warm advocate in Mr. Teale, of Leeds. At the London Hospital it was first adopted, by Mr. Ward about two years ago, and since then has been employed by his colleagues, Mr. Critchett and Mr. Golland, each in a single instance. All the three patients were children, all recovered well, and in all it was considered that much less than the usual amount of bleeding took place. At Guy's Hospital, Mr. Cock has performed median lithotomy several times, and Mr. Eriehsen has done the same at University College Hospital, both Surgeons being, we believe, well satisfied with its results. On all hands it was considered to be the best adapted for children and for small stones. At St. Bartholomew's, Mr. Lloyd still continues to operate in all cases by his recto-urethral (median) method, which was described in detail when he first adopted it in 1853. He informs us that he has not yet lost a case after it, and considers it decidedly preferable to the lateral operation. His colleagues, however, without exception, we believe, always employ the latter. At the Metropolitan Free, Mr. Hutchinson always employs his rectangular catheter-staff, and considers that he obtains great advantage from it. The same instrument has been employed at King's College, by Mr. Lee, but it is not, as far as we observe, in use at any other Hospitals. In a recent instance in which the calculus was of large size, Mr. Hutchinson injected the bladder with oil instead of water, in the hope of facilitating the dilatation of the parts.

With regard to the median operation as advised by Mr. Allarton, it is universally admitted to be adapted only for small calculi. Now Mr. Lloyd's experience during the last few years has quite proved, that when the anterior commissure of the
sphincter ani is cut clean through from the perineal wound, there is no danger of the parts not healing. Might it not be well, therefore, to adopt this measure whenever, after the usual median incisions, the stone has been reached and is found too large for removal? Mr. Lloyd's operation gives abundance of room.—[Med. Times and Gazette.

On Different Forms of Syphilitic Inoculation.

The object of this paper was to show that primary syphilis does not always commence in the same way. The "specific pustule," in which all syphilitic diseases were formerly said to originate, is produced by one kind of syphilitic inoculation only, and that form is one which does not give rise to constitutional or secondary symptoms. As nearly all the experiments on syphilization had been performed so as to produce this pustular variety of the disease, it follows that no fresh constitutional syphilitic disease can be engendered by syphilization so practised. The kind of syphilitic sore which infects the system, commences in a different way, and when not artificially irritated, it gives rather to the adhesive than to the suppurative form of inflammation. This form of disease Mr. Lee has shown, in 1856, to be, as a rule, not inoculable upon the person who had it. This view had more recently been confirmed by the researches of French Surgeons. But although not ordinarily inoculable like the suppurating form of the disease, yet it was capable of being rendered inoculable by artificial irritation. The results of the inoculation were, however, then uncertain in their results, producing little local irritation, and capable of being transmitted by successive inoculations a very limited number of times. These observations applied only to inoculations performed upon the individuals who had at the time, or had previously had, infecting sores. The author described one kind of suppurating sore which was surrounded by induration, which could not always be distinguished from the induration of the infecting sore. The induration could not, therefore, always be taken as the diagnostic mark of a sore which would infect the patient's system. The character of the secretion, however, gave the information which the induration did not always give. If care were taken to prevent any accidental cause of irritation, the secretion from an infecting sore would soon cease to be purulent, whereas, in the suppurating sore surrounded by induration, (the phlegmonoid variety of suppurating sore,) the secretions would continue, as in other forms of suppurating sores, puriform to the last. The number of cases of indurated sores which had been said to have been inoculated by Dr. Sperino and others, led to
the conclusion that the two forms of disease now described, had not been distinguished from each other. It was now ascertained that the infecting sore could not, as a rule, be inoculated upon the patient having it, whereas the plegmonoid variety of the suppurating sore, was of all kinds the most readily inoculated. When inoculated artificially, it produced a pustule containing well-formed pus within forty-eight hours, and it was occasionally followed by an eruption of a brick red colour, confined to one part of the body, disappearing spontaneously, and not recurring. This eruption was, therefore, certainly not syphilitic.

The various points in the paper were illustrated by experiments, drawings, and tables of cases.—[London Lancet.

Useful Plan of Supporting Stumps After Amputation.

At Guy's Hospital for the last two years, Mr. Hilton has been in the habit of supporting the stumps of amputated thighs in a manner which is worthy of notice, from its cleanliness and convenience, together, with the comfort accruing to the patient. It consists in applying a short and broad splint under the stump, which is elevated at an angle of forty degrees; beneath the splint is a small cushion, and a light bandage is applied over all. This permits of examination and dressing without the slightest disturbance to the patient, the stump always looks clean and healthy. The cases in which it is at the present moment employed, are the following:

A young man, twenty-two years of age, was admitted on the 23rd March, for extensive pulpy degeneration of the synovial membrane of the left knee, with incipient disease of the lungs. The former had existed for twelve months, and was making rapid inroads upon his health. The thigh was removed at its upper third on the 23d ultimo; and when we examined the stump on the 5th instant, it had almost entirely healed, and looked remarkably clean and healthy from the way in which it was put up. The phthisical symptoms have completely subsided.

A second case was that of a man, aged forty-eight years, who, as we gather from the notes of Mr. Tuck, his dresser, was kicked by a horse on the knee, twenty-one years ago, causing, at that time, a wound over the patella. He has been subject to frequent attacks of pain and swelling ever since. Three years ago the symptoms generally increased. Seven weeks back an abscess was opened at the side of the knee, and subsequently two openings had to be made to let out pus from the joint. The bones were much diseased, and he had suffered most acute pain. Considering his age and other circumstances, Mr. Hilton
thought the most prudent course was amputation through the thigh, which he performed on the 5th instant, under chloroform. When placed in bed, the stump of this patient was carefully put up by Mr. Tuck in the manner already described, and we learn he is going on extremely well.—[Ibid.

EDITORIAL AND MISCELLANEOUS.

Medical College of Georgia.—It will be seen by the Twenty-eighth Announcement, published under cover of our July number, that the Annual Lectures in this Institution "will commence on the first Monday in November next, with a general Introductory by Professor Joseph Jones." The prospects of the College for a large and intelligent Class are most encouraging. Students arriving in the city, will find the Registrar, Dr. Charles Palmedo, in the College Library, who will introduce them to the several members of the Faculty, and assist them in procuring desirable board. Important improvements have been made in the College edifice, and the comfort and convenience of the Class have had a large consideration by the Trustees, in their new arrangements.

Prizes to Medical Students—Their Value.—There is a charm in emulation, and the hope of winning honorable distinction, though not the highest, is yet a very potent, stimulus to our best exertions. "Emulation and the love of Honor," says one of great experience in teaching,* "constitute the appropriate stimulus in Education." 'In learning,' says the wisdom of Bacon, 'the flight will be low and slow without some feathers of ostentation." Mental exercise is ever sure of its reward. "The Gods," says Epicharmis, "sell us every thing for toil." We may enter the lists and contend vigorously for the prize—straining every nerve, we may reach the goal, barely in time to see another hand grasp the treasure which was so nearly our own—in disappointment we turn away, but seldom are we disheartened at the contest; instead of being tired and weary, and weakened, we have been strengthened by the energy put forth; we have measured arms, may be, with a giant, and though we did not conquer, we feel that, but another trial, is the condition of success. The sure rewards of labor are first the pleasure which comes in energizing, and next, and far more important, the increased power and desire to energize again. "The intellect is perfected, not by knowledge, but by activity," is the dictum of one no less than Aristotle himself.

We find in the last Annual Announcement of the Medical College of Georgia, that encouragement is offered their Class at the approaching session, in the following terms:

"The Faculty of the Medical College of Georgia, ever desirous of cultivating a high degree of Scientific and Literary excellence among their Graduates, have established prizes for the competition of the Class.

At a meeting of the Faculty, held February 26th, 1859, it was

Resolved, "That at all future Commencements, a Gold Medal, of the value of Fifty Dollars, ($50,) be awarded to the writer of the best Thesis, and one of Twenty-five Dollars, ($25,) to the second best."-[Extract from Minutes."

We highly approve the measure, and confidently predict a marked improvement in the style and value of the Theses of the approaching session in November.

Origin of Plants.—A Hint to those whom it may Concern.—The following list of Indigenosities, (everybody has a right to coin words we believe these days,) reminds us of the student-experience of one, who, though now a distinguished Professor, was once, it appears, often at a loss when questioned as to the origin of Medicinal Plants. He finally says, that he fell upon an expedient in which guessing was the basis-element. He found that most of the potent vegetables of the Materia Medica, at that time, say, near thirty years ago, came from a particular region; and therefore, whenever asked by his Professor where such or such is indigenous, his invariable and confident answer was, "From the South of Europe, Sir!" He seldom failed to give satisfaction, nor did the wisdom of his Philadelphia Professor ever even suspect the ruse.

He is himself now, as we have said, a Professor, and, we believe Materia Medica is his department. Would it not be curious if some of his own pupils should in their turn, gain his commendation by a similar device? Remember then, "The South of Europe," more physic comes from there "than is dreamed of in the philosophy" of most students. 

Verbum sat.

Origin of Plants —
Madder came from the East.
Cellery originated in Germany.
The chesnut came from Italy.
The onion originated in Egypt.
Tobacco is a native of Virginia.
The nettle is a native of Europe.
The citron is a native of Greece.
The pine is a native of America.
Oats originated in North Africa.
The poppy originated in the East.
Rye came, originally, from Sardinia.
Parsley was first known in Sardinia.
The pear and apple are from Europe.
Spinach was first cultivated in Arabia.
The Sunflower was brought from Peru.
The Mulberry tree originated in Persia.
The Gourd is probably an Eastern plant.
The Walnut and Peach came from Persia.
The Horse Chesnut is a native of Thibet.
The Cucumber came from the East Indies.
The Quince came from the Island of Crete.
The Radish is a native of China and Japan.
Peas are supposed to be of an Egyptian origin.
The Garden Cress is from Egypt and the East.

**Horse-radish came from the south of Europe.—[Exchange.**

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**Ingenious Device.—** We notice in a New York newspaper, an advertisement, half a column long, headed "Health of American Women," setting forth the virtues of the "Graefenberg Medicines." The proprietor of these medicines, or the "Graefenberg Company," represented by Dr. Bridge, a "regular physician of fine attainments and of great judgment and discrimination in the treatment of disease," offers testimonials "from the Governors of two States, the Chairman of the Board of Health of New York, one of the Surgeons-in-chief of the Bellevue Hospital, many clergymen—including the Rev. N. Bangs, D. D., the head of the Methodist Church; the State Chemist and Assayer of the State of Massachusetts; the Mayor of New York City; the United States Commissioner to Great Britain; the proprietor of Barnum's Museum, and many other public men," &c. There is nothing surprising in all this, for many of the above names are attached to other quack medicines, and there is a frankness in placing the proprietor of Barnum's Museum" on the list, which is quite refreshing. We confess, however, we were not a little surprised to see the names of several of the most eminent New York medical men appended to the advertisement. While we were wondering how these names could possibly have been procured, a closer examination showed that though they are printed in a conspicuous manner, so as to appear at first sight, as if endorsing the wonderful virtues of the Graefenberg medicines, there is in reality no fraud, since it is only stated that "convincing and unanswerable arguments have been addressed to the leading physicians and surgeons of the day, prominent among whom were Dr. Valentine Mott, President and Professor of Surgery," and half a dozen others. We do not know what reply these gentlemen made to the convincing and unanswerable arguments, but the Graefenberg Company has not seen fit to publish them, perhaps with a view of persuading the public that "silence gives consent."—[Boston Med. and Sur. Journal.

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Dr. S. D. Gross, Professor of Surgery in the Jefferson Medical College, has been elected to the Surgical Department of the Howard Hospital, to fill the vacancy caused by the resignation of Dr. R. L. Madison. The duties of this position are divided between Dr. D. D. Clark and Dr. Gross.—[Ibid.

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The Reportoire de Chimie says that the *Ailanthus Glandulosa*, or Japan varnish tree, yields a fixed oil, which is a powerful vermifuge.
Alcoholic Extract of Mezereum.—By treating with alcohol the fresh bark of Daphne mezereum, a dark green extract is obtained, of a burning acrid, bitter, and at the same time sweetish taste. Water extracts from it a brown red fluid, consisting mainly of sugar, daphnin, malate of potassa, salts of lime, and magnesia, but still retaining some acrid taste. By dissolving the residual green resinous matter in some alcohol, so that it becomes of the consistency of honey, by evaporation in the air, a strong preparation is formed, possessing the rubefacient property in a high degree, and which may be used as a salve or spread upon silk or other material.

By treating such an alcoholic resinous solution with an alcoholic solution of potassa, a milky green fluid is formed upon the addition of water, and on adding to this dilute hydrochloric acid, light green flocculi precipitate, perfectly soluble in alcohol when washed, and possessing the same acrimony. This shows that the resinous matter particularly possesses the rubefacient property, and that it is not destroyed by the process of saponification.—[Wittstein’s Vierteljahresschrift, and Penin. Independent.

Syrup of Coffee for Whooping Cough.—When whooping cough has resisted the agents most ordinarily used, the following syrup, which is the formula given by M. Delahaye, slightly modified, will be used with full success. We have experimented very often, says Dr. Courbassier, in the localities where whooping cough appears each year with an epidemic character, and it has rarely failed us. Here is the mode of its preparation:

Take eight ounces of Mocha or Martinique coffee, slightly browned, in powder; treat by displacement with boiling water, so as to obtain sixteen ounces of infusion.

Dissolve in this liquid, alcoholic extract of belladonna, alcoholic extract of ipecac, of each 3f 1-4; alcoholic extract of chinchona, gr. xxxvj; add sugar 3xxvj. Digest on a water bath, and filter.

The dose for children of three or four years is a tablespoonful repeated three times a day. Under this age, the dose should be reduced one half.—[Revue de Thérapeutique, and Ibid.

Atropine in Epilepsy.—Dr. Maresch, of Vienna, administers atropine to epileptic patients in the following manner: he dissolves a grain in five hundred drops of rectified alcohol, and of this solution he gives from five to ten drops, (from one hundredth to one thirtieth of a grain). This dose is administered every day from sixty to ninety days, without intermission, and then is to be resumed after an interval of from thirty to forty five days. Coffee, tea, and chocolate must be excluded. It favors menstruation, rarely induces constipation, more frequently diarrhoea, during which it must be suspended. (Translated from L’Union Med., by Dr. S. E. Chaille.)—[V. Y. Med. Press.

Formula for Mentagra.—Administer the usual general medidines, and when the scabs have fallen away, use the following solution:

& Zinci Sulph. 3ss. Cupri Sulph. 3j.
Artificial Pupil—Iridesis.—The usual way of operating for artificial pupil is often clumsy; the pupil is too large and irregular, and often too near the cornea. You cannot regulate the size and place by the old method. Try a new way by tying the prolapsed iris in the following way:—The patient, if at all restless, being placed under the influence of chloroform, the wire speculum is inserted, and with a pair of forceps, a small fold of the conjunctiva close to the cornea is held, so as to fix the eye. An opening is then made with a broad needle through the margin of the cornea, close to the sclerotic, and just of sufficient size to admit the canula forceps; with it a small portion of the iris, near, but not close to, its ciliary attachment, is seized and drawn out to the extent considered necessary to enlarge the pupil; a piece of fine floss silk, previously tied in a small loop round the canula forceps is slipped down and carefully tightened around the portion of iris made to prolapse, so as to include and strangulate it. This manoeuvre requires a little practice and dexterity, and is best accomplished by holding each end of the silk with a pair of small forceps with broad extremities, bringing them exactly to the place where the knot is to be tied, and then drawing it moderately tight. A single tie is sufficient; the ends are then cut off; and the operation is complete. Little or no irritation usually follows. The small portion of iris included in the ligature, speedily shrinks, leaving the little loop of silk, which may be removed from the eye about the second day. By this method, the size, form, and direction of the pupil can be regulated to a nicety.—(Mr. Critchett, p. 242).—Braith. Retro.

Premontory Symptoms and Treatment of Diphtheria.—Symptoms are a deposit of white putty-form membrane about the isthmus faucium, or between the anterior pillar and the tonsil, with generally slight constitutional disturbance; the cervical glands generally enlarge about the fourth day, earlier than in scarlatina; tongue foul, but not punctated as in scarlatina; nose full and tumid, and sometimes a slight acrid discharge from the nostrils; prostration, without typhoid symptoms; pupils lax; pulse feeble; albumen sometimes found in the urine, more frequently in the late stages. Death takes place generally about the eighth day.

Treatment.—Destroy the patches with solid nitrate of silver, once or twice if necessary. It may be necessary to administer a large dose of calomel in the early stage; pencil the enlarged glands with nitrate of silver; follow first dose of calomel with aperients, till the evacuations are regular; fresh air, abundant food and stimulus, and especially after the sixth day keep the patient flat; give muriatic acid with chloric ether every few hours, or full doses of ammon. sesquicarb. (Dr. S. Monckton, in Medical Times and Gazette.)—N. Y. Med. Press.

Insanity Among Negroes.—In Louisiana, the proportion of insane negroes is 1 in 2,477; in South Carolina, 1 in 2,999; in Massachusetts, 1 in 43; in Maine, 1 in 14; showing conclusively that freedom does not agree with an African's understanding.

The deaths among the Africans in New York, are twice as numerous as those of the whites in the same city. The number of the black popu-
loration in the West India Islands is steadily and rapidly decreasing. The disease from which the greatest mortality proceeds, is pulmonary consumption, arising, it has been suggested, from the want of adequate nutrition, in the most fertile section in the world, but which the African is too indolent to cultivate. It is computed that, at the present rate of diminution—a tenth part of the whole population every four years—the negro race will have almost ceased to exist in the British West India colonies, before the termination of another century.—[Rich. Dispatch, and N. Y. Med. Press.

Hernia.—Wützer's Operation.—The needles in present use are too short, and apt to slip. They should be at least six inches long. The instrument should not be withdrawn at an earlier period than eight days, and not later than fourteen days. The instrument may be made of much lighter materials than usual, as malacca or bamboo cane, or metallic cylinders with a central tube for the needle. If within five or seven days no discharge of epithelium, fat, or serum appears from the invaginated scrotum, some preparation of cantharides, as the emp. or acet. lyttæ should be introduced. (Mr. E. Lister, p. 180.)

Radical cure of Femoral Hernia.—Several interesting cases of the radical cure of femoral and ventral hernia are related; they are the first attempted in this country. The mode of operating was the following: The patient being on his back, and the buttocks well raised, the hernia is returned, the little finger being carried well through the crural canal and femoral ring. A well-curved canula needle is carried on the finger, and its point made to press against the abdominal parietes; the needle is then thrust through them, and a silver wire being passed into the eye, it is drawn through. A small piece of vulcanized India-rubber, about the size of a split pea, is attached to the crural end, and fastened by means of a split shot; the other extremity is then passed through another piece of rubber about the size of a florin, and the two extremities drawn tightly together and fastened by a split shot. A portion of integument is thus drawn into the canal, and by an incorporation of this invaginated-plug with the borders and surfaces of the crural canal, the radical cure is effected. The wire may be loosened on the eighth or ninth day. From the cases related (six in number,) the conclusions arrived at are: that this is an operation "unattended with danger;" that "though the peritoneum be wounded (even in three places,) its perforation is innocuous." (Mr. R. Davies, p. 180.)—Brighthwaite's Retro.

Hereditary Influences in the Production of Insanity.—Hereditary influences, striking as these often are, really exist in but a very small proportion of all the cases of insanity; and even where they do, the individual who is strictly mindful of natural laws, avoids excesses of all kinds, and is happy in his domestic and social relations, may be really much better off than those who lead a different kind of life, and yet have never known an ancestor to suffer from such an affliction.—Dr. Kirkbride's Hospital Reporter, and Vir. Med. Journal.
Formula for the Combination of Nitrate of Bismuth with Copaiba and Cubebs.—According to the observations of M. Caby, the nitrate of bismuth combined with balsam of copaiba and powdered cubebs, possesses the property of neutralizing the irritating effects produced habitually by these medicines on the digestive canal. The formula which is employed at the Hospital of St. Lazare is a mixture of equal parts by weight of balsam of copaiba, powdered cubebs, and nitrate of bismuth, with some essence of peppermint as a flavouring ingredient. This combination is said to be supported easily by the most delicate stomachs; there is no excitement, epigastric heat, or diarrhoea, so that the action of the medicines being entirely concentrated upon the genito-urinary passages, the desired results are more rapidly and easily obtained.—[Bulletin Générale de Thérapeutique, from Brit. and For. Med. Chir. Rev.

Formula for a New Elixir of Pepsine.—The syrup of pepsine, recommended by M. Corvisart, not being capable of preservation for a long time, and the elixir of Garus having a disagreeable taste, M. Mailhe has invented a formula of pepsine associated with wine, alcohol and sugar, in sufficient quantity to conceal the peculiar taste of the ferment. The proportions are six grammes (about 3iss.) of amylaceous pepsine, twenty-four grammes of distilled water, fifty-four grammes of white wine of Lunel, thirty grammes of white sugar, and twelve grammes of spirits of wine. This elixir has a very agreeable taste, and women and children can take it with pleasure. It is administered immediately after each meal, in the dose of a tablespoonful, containing exactly the quantity of pepsine necessary for digestion, namely, one gramme (about fifteen grains.)—Ibid.

On an Inexpensive Mode of Administering the Protoiodide of Iron.—The protoxide of iron has been given in the form of pills, syrup, or oil. The first two furnish good preparations, but they are expensive, and as the treatment with iodide of iron often requires to be long continued, the poorer classes of patients are sometimes obliged to abandon its use. The mode of administration recommended by a Belgian pharmacist is by preparing a solution of iodide of iron in such proportions that one or two drops represent five centigrammes (about one grain) of the iron salt. This is preserved in a stoppered bottle, and some iron filings are added, in order to preserve it from decomposition. When the solution is to be used, one or two drops of it are poured either upon a piece of sugar or in a spoonful of water, beer, or gruel.—[Ibid.

On the Combination of Iodine and Sulphur by the Medium of Oil.—The combination of iodine and sulphur having very little stability, M. Vezu, a pharmacist of Lyons, has proposed to combine the iodine and the sulphur by dissolving them each separately, beforehand, in oil of sweet almonds. The sulphur is heated in the oil until it is dissolved, but the iodine is dissolved in the oil while cold. The resulting compound has the taste and smell of heated oil, and has a chestnut colour.—[Ibid.

La Charité.—MM. Andral and Rayer have resigned their positions as Physicians to this institution, which they had so long held with credit and honor.
Ipecacuanha and Delirium Tremens.—The jail physician of Chicago has had 100 cases of delirium tremens the past year, of which only four proved fatal. Of his manner of treatment, the doctor says—"Ipecacuanha, which I have tried in thirty-six cases, I found most remarkably successful, quieting the nervous system, exciting the appetite, acting on secretions, and uniformly producing sleep. When a case is not of too long standing, I give it as an emetic the first dose, and afterwards I give from 15 to 18 grains every other hour. Connected with this remedy, I use shower-baths, and let the patient drink strong beef-tea, without any alcoholic stimulants."—[Newspaper.

Atropia in Tetanus.—The editors of the Semi-Monthly Med. News report the successful treatment of a case of tetanus with atropia, in doses of one-twentieth of a grain, repeated every third hour until narcotism was produced. They say, "So far as the illustration of its influence in the treatment of this case furnishes us authority for speaking, we are satisfied that our appreciation of atropine, as a remedy in tetanus, cannot be over estimated. It subdued time and again, with a promptitude and a measure of extent too striking to be mistaken, the increasing spasms, and soothed the general excitement of the system.—[Ibid.

The Leniceps.—M. Mattie, presented very lately to the Academy of Medicine of Paris, an instrument for the extraction of the child, which differs from the ordinary forceps, by being very short, and by the branches locking upon a transverse wooden handle. The inventor considers that his instrument does not frighten the mother, as it may be used without her knowledge, and that it acts very gently upon the child. He therefore proposes to call it leniceps (leniter capiens,) in contradistinction to forceps (fortiter capiens).—London Lancet and Vir. Med. Journal.

Itching of the Anus.—There are few things more distressing and troublesome. Use the following ointment: Glycerine, one ounce; purified tar, half a drachm; and with the aid of heat, powdered starch, half an ounce. This makes an ointment of thin consistence, and easily spread. It dries up excoriations, checks exhalation, and dissipates slight cutaneous phlegmasia. Another preparation of pitch is the following: Cod-liver oil, two parts; oil of pitch, one part; used for itching and excoriations, as the other. (M. Gilbert, p. 185.)—[Braithwaite's Retro.

Mal-assimilation in Children.—Sometimes a pallid cachetic emaciated child will in a few days gain some pounds in weight, after the operation of a brisk cathartic. What explanation can be offered of this fact? If the intestines of such children be examined, the mucous absorbent surface will be found to be covered by a thick tenacious mucus, completely preventing assimilation of the chyle. A brisk cathartic, especially calomel, which may be combined with rhubarb and scammony, will wash this away, and the lacteals thus be left free to absorb the chyle, with which, for the first time they come in contact. (Mr. M. Henry, p. 264.)—Ibid.
Anodyne Liniment in Otitis.—M. Trousseau recommends the following liniment in acute otitis, namely a mixture of the alchoholic extract of belladonna in water, with glycerine. A cotton ball, soaked in the mixture, to be placed in the external auditory canal.

Strange Provisions in a Will.—It was lately announced at a parochial meeting in St. Mary-le-bone, says the Lancet of June 25th, that Mr. William Kensett, a well known reformer of that parish, who died of cholera in Paris, had stipulated in his will that his body should be given up to one of the Medical Colleges of the metropolis, for dissection, and that his bones and remains should then be handed over to the Imperial Gas Company, on condition that they consumed them in one of their retorts.—[Med. and Surg. Reporter.

Serous Bronchocele treated by Puncture.—The cystic variety of bronchocele is interesting from its rarity as compared with the hypertrophy of the thyroid gland.

A young woman was recently admitted into King's College Hospital, with a considerable enlargement of the thyroid, but mainly depending upon the presence of a cyst, which had been progressing for 15 years. The growth was prominent and well defined, soft and fluctuating.

Mr. Fergussen after giving chloroform divided the super-strata of tissue, and then the cyst, when out gushed a large quantity of dirty, brown-colored, serous fluid. The cyst was stuffed with lint, and compresses and bandage applied.—[Ibid.

Condylomata.—In those raised patches of skin, known as mucous tubercles, or condylomata, existing about the verge of the anus, and around the genitals, but especially those which are wide spread and flat, the application of a powder, consisting of equal parts of savin and alum, will be found very successful in producing diminution of the swelling, and causing them to dry up.—[Braithwaite's Retrospect.

Lepra Inveterata.—In the treatment of this most obstinate affection, much will be gained by a proper regulation of the diet. Bread, milk, eggs, and vegetables, as potatoes, water cresses, &c., should alone be allowed, and all alcoholic drinks avoided. A warm bath twice a week is of the greatest use. The medicinal means principally of use are, arsenic, bichloride of mercury, and iodine, for which the decoction of elm bark forms a good vehicle. An ointment containing calomel and pitch, is one of the best local applications. (Dr. Willshire, p. 230.)—[Ibid.

Poisoning by Mercurial Vapor.—The Pacific Med. and Surg. Journal reports a case of mercurializing by being exposed to volatilized quicksilver, in the operation of burning it from the amalgam, which is the practice in the gold mines of California.

Gonorrhæa and Leucorrhæa.—In weak and lymphatic subjects, injections of the perchloride of iron have been tried with success, the proportion of the perchloride being twenty drops to three ounces and a half of water. (M. Demarquay.)—London Lancet.