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Original Communications.

CASE OF MELANOSIS OF THE EYE BALL.

By RICHARD A. KENNEDY, M.D., C.M., Professor of Anatomy;
University of Bishops College.

(Read before the Medico Chirurgical Society of Montreal,
January 25, 1873.)

Mr. G., 56 years of age; very tall; of spare habit of body; top of head bald; the hair remaining being nearly white, and having lost all his teeth, looks to be much older than what he really is.

I was consulted by him in the month of August last, being requested to examine his left eye, which presented the following appearance: The conjunctiva was of a yellowish tint, traversed in all directions by enlarged blood vessels. The eyeball was slightly enlarged, and its tension increased. At the upper and inner angle of the orbit, about a quarter of an inch from the cornea, there was a slight bulging, as if the contents of the eyeball were escaping at that point. The cornea was clear and transparent, but seemed to be flattened. Iris widely dilated and pushed forward by the lens, which latter was resting against the cornea, being opaque and presenting a yellowish flocculent appearance. There was no pain in the eyeball, which could be freely pressed upon; but at times he suffered from great supra-orbital neuralgia. The diagnosis was intraocular tumor, but of what nature I was unable to determine. From the bulging and increased tension it was evident that the eyeball would soon burst, and I advised its immediate removal. He wished me to try the effect of medicine, as he very much dreaded the operation. I explained how useless that would be, and the danger of delay, and urged its immediate removal; but as it did not trouble him much, he said he would wait until cooler weather. I did not see him again for some time. As he subsequently came under treatment, it will be better that I should now give the previous history, quoting his own words:—

"I was born with different colored eyes, a black and a blue one; the left being the black one. There was no defect in the sight of either, and I used them, perhaps, excessively, until ten years ago, when I noticed them getting weaker. About this time I was attacked with neuralgia, which commenced in my right cheek, near the top. I thought it was toothache at first, as it loosened two teeth which, after a short time, fell out without pain, and not at all decayed. Soon after the neuralgia returned, and took out one or two more teeth; this was repeated until, at the end of about three years, it had gone

regularly round both jaws and taken every tooth out, not one of them being decayed. The neuralgia then mounted to the head, and the pain began to run from the left eye back to the crown. About this time, that is seven years ago, I noticed an inability to see clearly on the streets from the left side of my left eye. I was then wearing glasses, and called to ask the optician if there was anything wrong with them. He told me to see a physician, and Dr. Campbell, whom I consulted, at once said I had cataract, and advised me to cease working at my profession as an accountant, for a while, and call upon him again when it was entirely covered. Long before that occurred, it became intensely painful and inflamed, and the neuralgic pain became frightful. I called again on Dr. C., who examined the eye with the ophthalmoscope, and said that I had ophthalmia as well as cataract. At the same time, on account of the advanced state of the cataract, he could not do anything more until it was still further developed. He therefore merely prescribed a lotion to relieve the pain. From that time, over six years ago, until this summer, I have been in more or less pain all the time, having exacerbations every ten days or a fortnight. I would take a dose of some medicine, such as salts, which made the pain worse for a day or two and then better for a week, getting gradually worse within a fortnight again. But, during all this time, it was no doubt getting radically worse. At last, in July of this year, I found it unbearable. Dr. Campbell being absent I was referred to Dr. Howard, who said it must come out, but advised me to wait until Dr. Campbell returned; as it had gone so far it might be delayed until cooler weather."

As I have stated, he called upon me in August last. I did not see him again professionally until the 16th of October, when I was sent for. He had been working the day previous in his garden, and passed the evening in company with some friends at his house, and, to use his own words, "Had been more free from pain that night and for some time previous, than for several years, nor had I provoked a sudden attack by any indiscretion that I know of." In fact, he congratulated himself on going to bed, that the eye would bother him no more. Shortly after retiring he was seized with a violent pain in the eye, but, supposing it to be a return of the neuralgia, did not get up, but bore it as patiently as he could till morning; it was then discovered to be much inflamed. I saw him during the forenoon. The conjunctiva was acutely inflamed, the inflammation seeming to implicate the subconjunctival tissues; the eyelids were greatly swollen by œdema:

and there was intense supra-orbital neuralgia. The treatment consisted in the constant application of fomentations; a two-grain solution of atropine, twice a day, dropped in' o the eye; and to relieve the neuralgia, a liniment of aconite and chloroform to the head. The bowels were fully operated on by magnes. sulph., and a draught of chloral hydrat at bed time, to be repeated if necessary.

Oct. 17th.—Neuralgic pain much lessened; conjunctiva swollen and very vascular, and a strip of it protruding between the edges of the lids; this strip I freely scarified, and encouraged the bleeding, which gave great relief.

Oct. 18th.—Œdema of lids decreasing; supra-orbital pain is slight; still considerable chemosis of conjunctiva, which was again scarified; discharges but little pus. Ordered argent nit. gr. ii. ad aquæ ζ i., to be dropped into the eye every four hours, and cold water compresses to the lids. From this date he continued to improve, and on

Oct. 22nd.—I found the œdema was much lessened. Chemosis of conjunctiva still great; slight discharge and not much pain. The conjunctiva was brushed over with a gr. xx sol. of argenti nitras., and an astringent lotion of zinci sulph. grs. ii., alum grs. iv, aq. distill. ζ i., directed to be applied every four hours. To continue the cold compresses, and internally a mixture of the citrate of iron and quinine.

He continued to improve, the conjunctiva became less vascular, and the œdema of the lids greatly lessened, so that on the 2nd of November I was able to fully draw upwards the upper lid, and, on doing so, discovered, at the upper and inner angle of the orbit, a small discolored tumor, as if the contents of the eyeball were about escaping at that point. As the conjunctiva was very thin over it, I advised immediate removal of the eyeball, and the following Monday was fixed upon for the operation.

Nov. 4, 2 p.m.—Assisted by Drs. F. W. Campbell, Trenholme and Perrigo, I removed the eyeball. The patient was placed on a couch, and chloroform given; during its administration he was boisterous, and there was considerable muscular spasm continuing for some time. It was thought best not to use a top speculum on account of the tumor, the eyelids being drawn apart by retractors. The conjunctiva, which was still much swollen, being divided around the cornea, and including that portion which covered the tumor at the upper and inner angle, which necessarily made an irregular opening in that membrane. The tendons of the recti were then caught up by a strabismus hook and divided. The globe was then

turned so that the superior and inferior oblique were divided; it was then lifted out, and the optic nerve separated by blunt pointed scissors. This latter part was performed somewhat hurriedly, as we did not think it proper to continue the chloroform, serious symptoms presenting themselves. Very little hemorrhage ensued. A plug of soft sponge was placed in the wound and the lids closed over it, a wet compress applied over them, and a bandage drawn over both eyes. After the chloroform had passed off, and as the pulse was still weak, I gave about an ounce of brandy and got him into bed. I saw him again at eight p.m. Very little pain, pulse normal; did not disturb the dressing. To get pulv. opii gr. i., and repeat in four hours should there be much pain.

Nov. 5th, a.m.—Did not sleep during the night; but little pain; pulse normal. Bandages were removed, and the plug drawn out, which gave great pain at the time, but this soon subsided. Compress and bandage re-applied.

3 p.m., same day. Eyelids slightly œdematous; complains of slight pain; otherwise doing well. Syringed out socket with luke-warm water.

Nov. 6th.—Lids greatly œdematous and slightly discolored. Complains of much pain and discharging a serous fluid. To be syringed out often with a weak solution of carbolic acid; continue cold compresses; and to take pulv. opii gr. i, every four hours,

Nov. 7th.—Found him sitting up in bed. Œdema lessened; but little pain, and slight discharge. Omit opium and continue the other treatment. From this date he continued to improve; and, on the 10th, the œdema was gone, wound looking healthy, discharges more freely, no pain, appetite good. He continued to improve, but owing to the irregular opening in the conjunctiva, the final closure took longer than usual, a small button of granulations requiring to be snipped off twice. He is now entirely free of pain; the conjunctiva is regaining its healthy appearance; will have a good stump for an artificial eye, the muscles acting freely in all directions; and the right eye is stronger in sight than it has been for some time. Health good, and can attend to personal matters.

On examining the eyeball I found intimate adhesions between the sclerotic and tendons of the recti closer than in the normal condition. The optic nerve, in appearance, was healthy, the disease not having extended to it.

On cutting into the eye, found it filled with a soft black substance, having filamentous bands running through it. By the microscope, there was a large amount of granular and pigmentary matter; cells

resembling blood corpuscles, but larger and containing nuclei; and cancer cells, mostly fusiform in shape. From this, I considered it to be a melanotic cancer, involving the whole of the eyeball. Probably the disease commenced as sarcoma of the choroid, taking into account the length of time intervening between the first eye symptoms and the excision of the eye.

That the disease had commenced on the choroid I infer from its melanotic character, depending upon pigmentary granular deposits of an intensely black color, called melanin; which appears to be merely altered haemotoidin becoming endowed with greater power of resistance than freshly formed haemotoidin, so as to undergo no further change.

In itself this is not an important form of degeneration, and must be looked upon as the result of those conditions upon which the formation of pigment depends, than as in any way due to the presence of pigment itself. Pigmentary degeneration being described as consisting of "an abnormal formation of pigment in the tissue, derived from coloring matter of the blood." In the case before us, it no doubt, was owing to the selective power of the cells of the choroid separating the coloring matter from the blood. For it has been generally observed that growths originating in tissue normally containing pigment, are most frequently melanotic in their character.

Two forms of malignant growth are most frequently met with in the choroid. 1st. Sarcoma; 2nd. Carcinoma, there being two chief varieties of the latter—medullary and melanotic. Sarcoma and cancer may co-exist, forming a mixed tumor containing a large amount of pigment, which is then termed melanotic sarcoma, and which is the most frequent form of intraocular tumor. Both forms are equally malignant, though, in point of time, cancer is most rapid. Sarcoma, so long as it is confined by the sclerotic, being generally slow. What connection the previous neuralgia and the shedding of the teeth may have had to do with the disease in the eye, I am unable to explain, as I find no mention of such effect occurring previous to, or in connection with intraocular tumors. It may be merely coincidental, but it is remarkable that the teeth should all be lost in so short a time, and followed immediately after by the eye symptoms. The fact of the eyes being of different colors, and that it was the black one which became diseased, is noticeable as a tendency in that eye to an increased formation of pigment, may have determined the melanotic character of the tumor. After the loss of the teeth the neuralgia left the face

for the head, at the same time there was loss of vision on the "left side of the left eye," so that he could see only half the light when looking at a lamp. As we know that the image of an object is inverted within the eye, the disease must have commenced on the inner side of the eye; the retina becoming detached and pushed forward at that point, so as to have its function impaired or lost. This was confirmed by the tumor perforating the sclerotic at the upper and inner angle of the orbit, near the cornea, at which point the sclerotic, being thinner, would offer the least resistance. That the tumor was not discovered when the eye was examined by the ophthalmoscope, no doubt was owing to the obscuration of light by the cataractous condition of the lens. In other respects, since that time, the symptoms, as described by himself, were those following the growth of an intraocular tumor: the formation of a cataract, and its yellowish flocculent appearance, the intense neuralgia of that side of the head, &c. That it partook, latterly, of the nature of true cancer, I judge from its softness and the character of its cells; but, that it was also sarcomatous I infer from its slow growth and the existence of round corpuscles containing nuclei characteristic of sarcoma.

A CASE OF OBSTRUCTION OF THE DUCTUS COMMUNIS CHOLEDOCHUS, BY MALIGNANT GROWTH.

By E. H. Trenholme, M.A., M.D., Professor of Midwifery and Diseases of Women and Children, University of Bishop's College, Fellow of the London Obstetrical Society, &c., &c.

The subject of this paper, F. B., aged 68, and a native of Ireland, was a tall, well-formed, active and intelligent man. He was a plasterer, and had always enjoyed remarkably good health till within the last six or eight months of his life. On 7th November, 1872, I was called to see him, and found that he had been ill three or four days, with a pain at the pit of his stomach and general debility. He knows no cause for this attack, as he has been in better flesh and strength the last few weeks than for some time previous. There is nothing particularly noticeable about the appearance or condition of the patient, except slight pains of a persistent character, at the pit of the stomach, and loss of appetite. I ordered turpentine stupes to seat of pain, and gave tr. nuxvomica, internally. The bowels were regular, but the urine rather high-colored. During the following two days pains at pit of stomach more severe, appetite worse, more debility, urine deeper tint, pulse weak and rapid, tongue furred, and symptoms of

jaundice beginning to appear. Upon examining the abdomen, a large tumor was felt chiefly in right lumbar and hypogastric regions, which, by palpation, was recognized as enlargement of the liver and gall bladder. The stools were scanty and clay-colored; urine of very dark hue and loaded with bile pigment and biliary acids (Pettenkoff's test); the patient refused food on account of nausea and pain at the pit of the stomach.

Nov. 10.—The above symptoms, &c., were aggravated, and, in addition, there was exquisite tenderness over a small tumor lying a little to the right of the umbilicus. There was a good deal of fever; harsh dry skin. From these symptoms it was evidently a case of jaundice from obstruction of the gall duct, in all probability due to malignant tumor. The hot fomentations were continued, and aconite substituted for the nux vomica. This condition of affairs continued, with slight variations, up to the 22nd of November, when Dr. Sutherland saw the case in consultation with me. The history of the present state of the patient having been discussed, the only point undetermined was, whether the gall duct was occluded by the result of inflammatory action or malignant tumor. Although there were no indications of inflammation it was deemed wise to adopt a line of treatment suitable for this form of occlusion of the duct; he was placed upon alkalies and teraxicum. He was ordered nourishing diet, and the external application of an iod. of mercury ointment. This treatment was continued for several days without the slightest benefit; in fact, the skin became more deeply colored, and the urine more scanty, and high colored also. The pains at the pit of the stomach were more severe, and he refused to take more medicine. I may remark that, for some days past, there has been a great drowsiness, the patient sleeping the greater part of the time.

26th.—Patient very weak and rapidly losing flesh; urine still scanty; considerable fever, stools clay-colored as usual, and abdominal dullness of the tumor increased, also greater pain at the pit of the stomach. I prevailed upon the patient to take digitalis, and continue the abdominal application.

29th.—Patient easier; dulness of abdominal tumor and tenderness less marked; stools more natural color; urine more free and lighter color; skin not so dark.

Dec. 2nd.—Feels better to-day; not much pain; pulse full and less rapid; is able to take a larger quantity of food, but complains of utter prostration of his strength, and cannot move himself in his bed.

He passed the day comfortably, but suddenly died at 6 p.m.

On the following day—twenty hours after death—assisted by my friend, Dr. Kennedy, I made a "post mortem" examination. As the abdominal tumor was the point of interest, we removed the liver, the head of the pancreas, and a few inches of the duodenum. The liver was much enlarged and weighed about twelve pounds; its substance was friable, granular, and darker than normal; the gall bladder, the gall duct, the hepatic duct, and the ductus communis choledochus, were greatly distended. The gall bladder contained about sixteen ounces of pale straw-colored fluid, and its walls were thin and semi-diaphanous. The hepatic duct was distended with the same fluid to the diameter of one inch, and the gall duct to about three-fourths of an inch. The common duct was but slightly dilated at its commencement, and not at all at its termination. Under the common duct, and in the head of the pancreas and adjacent tissue, there was a hard tumor, about the size of an egg, which pressed upon the walls of the duct and prevented the escape of the bile. The duct itself was pervious, as you see by the specimen now passed round for inspection. The malignant nature of the growth was demonstrated by placing a section under the microscope. There are one or two features in this case which are worthy of notice. 1st. The previous good health of the patient, who was, in fact, in better flesh when taken ill than he had been for years. 2nd. The absence of such severe pains as would naturally be expected in malignant growths. 3rd. The escape of the contents (in part) of the common duct, two days before his death. This fact was recognized by the diminution of the central part of the tumor of the abdomen, and a return of the natural color of the fæces. This anomaly was, in all probability, due to the absorption of the adipose tissue between the duct and tumor, and also in the neighboring structures, by means of which the pressure was so far removed as to allow of the escape of some of the contents of the gall bladder.

Montreal, Victoria Square,
December, 1872.

Case occurring in Practice. Charbon. By WOL-
FRED NELSON, C.M., M.D., Bishop's Coll.

Joseph C——, employed by the Montreal Warehousing Company, called to consult me, on Friday, October 18th, stating that he had a very sore arm,

that necessitated his leaving his occupation, that of shovelling grain in the Company's buildings.

Previous History.—Up to time of present illness, had enjoyed perfect health. While at work on Tuesday, felt considerable itching on left arm, a few inches above the wrist; supposed that he had been bitten by a fly, (slaughter house in vicinity); the little red point, from frequent irritation caused by scratching, increased in size, and continued to trouble him all day. A vesicle then formed; and the arm next morning commenced swelling. To prevent the inflammation from extending upwards, he firmly tied a handkerchief about three inches below the elbow, and two inches above the vesicle. He still kept at work, although suffering considerably; passed a sleepless night, and consulted me on Friday morning.

The vesicle was about the size of a ten cent piece, well marked and umbilicated, with a very dark centre, surrounded by a halo of angry inflammation. Tongue furred; pulse 90; bowels costive. The inflammation extending to the deep tissues of the arm; swelling considerable, this, however, at the time, did not extend beyond the ligature he had placed below the elbow. Although rather late, I thought it well to puncture the vesicle in several places, when a serous fluid escaped that darkened the point of the bistoury used, and apply nitric acid. Gave patient two pil. cath. co., and prescribed the following:—

R. Quinæ sulph., ʒj.; ferri perchlor., q. s.; aquæ ad., ʒviii.

Sig. Coch. mag. ter in die ante cibum.

I directed the man to return to his boarding-house and apply poultices—fresh ones every few hours. Pain very severe; sleep procured by using chloral, as follows:—R. Chloral. hydrat. ʒj.; Aqua aurant. syr. simplex., ʒj. āā.

Sig. Take a fourth part when required.

The chloral acted very well, and was not attended by nausea; it was also taken in smaller doses during the day, and allayed the pain considerably. Saturday.—Swelling increasing; arm very painful; shooting pains running from the shoulder down to tips of fingers; hand increased in size; pills have acted freely; patient very anxious. After removing his ligature, the inflammation gradually crept up the arm; axillary region very sensitive; pulse ninety-four and hard; increased temperature of left arm well marked; appetite indifferent; uses tonic regularly.

Sunday.—Patient worse; high fever; pulse 100, hard; was slightly delirious through the night; per-

sistent elevation of temperature of left arm; appetite poor; uses poultices as directed. Inflammation still extending; line where ligature was applied not so well marked; complains of great pain; ordered full diet and stimulants in moderation; hand dark and congested, skin on dorsal surface presenting an ecchymotic appearance; fever higher; pulse 106; bowels regular, urinates freely; requires larger doses of chloral to procure sleep; tongue cleaner. The severe symptoms in this case lasted some fourteen days. At night the patient was frequently slightly delirious, possibly due to the chloral. Poultices were kept up for thirteen days, of the three kinds used, viz.: linseed meal, bread and milk, and carrots grated; the latter I think acted more satisfactorily than the former.

After the eighth day the inflammation ceased to spread; he at this time described the pain in the palm of the hand as lancinating, with a feeling that the hand would burst: no pus, parts œdematous, pitting deeply on pressure; fingers apart, due to swelling. The pulse during this period remained high, varying from 94 to 110. After the ninth day the slough commenced to separate, and came away at the fourteenth day, leaving a deep pit, fully as large as a full-grown filbert. Pain gone; swelling rapidly subsiding; can flex fingers; skin of hand peeling off; pulse 88; sleeps and eats well; tongue clean; bowels regular. Sore treated with a weak solution of carbolic acid, one to sixty; edges brought together by compresses. The granulating process was extremely slow; the skin surrounding the sore presenting a hard raised edge, showing little disposition to heal. By the twenty-seventh day it had nearly closed; when patient would return to his work. The healing process went on favorably, and the patient had no further trouble.

The solution of chloral used was made according to the Paris recipe—the orange flower water and simple syrup cover its pungent taste, and causes less of a burning feeling in the fauces than the simply aqueous solution. Much of the nausea and alarming symptoms caused by using chloral, have been due to an impure article being employed. In other cases it has not been fairly tried. The solution, if carefully prepared and kept well stopped, will remain good for two and three months. Under no circumstances should a solution be used that has a strong odor of chlorine. It has acted like a charm in two cases in my practice, of incipient delirium tremens, one of severe pleurodynia, one of puerperal mania, and in hysterical excitement. Many patients cannot take it.

Two years and a half in a London General Hospital. By G. F. SLACK, member of the Royal College of Surgeons, London, late House Surgeon Charing Cross Hospital.

(Number two.)

I think that Dr. Sayre is perfectly correct in his opinion that disease of the hip joint always originates from injury, and that strong healthy children are quite as liable to this affection as those that are of a weak scrofulous constitution. I have never failed to find a history of an injury of some kind, either a fall or a run over or a sprain, happening it may be a few months before, or several years may have passed by with the symptoms gradually becoming more distinct. Of course a very slight injury will set up the disease in a scrofulous child, and the disease will in such a case be more likely to run its course in spite of any treatment, and as a last resort the joint is excised. As such cases generally occur among the poor, they are usually taken to a Hospital for operation, which to a certain extent accounts for so many scrofulous children suffering from hip-joint disease, being found in Hospital, whereas, there are a great many strong healthy children suffering from this disease who never find their way into Hospital, from the fact that such cases are much more amenable to treatment, rest in bed alone often working a cure, or that they are the children of parents who can afford to have them treated at home, so that accounts of such cases are seldom recorded. As statistics about hip-joint disease have been chiefly taken from cases treated in Hospital, I think if a record of all the cases of hip-joint disease treated in private practice, had been kept, the results of such cases would be shewn to be much more satisfactory than of those that have been treated in Hospital, although a Hospital has so many advantages for such cases. If such be the case, attributing all cases of hip-joint disease to a scrofulous condition of blood would be wrong. The same applies to disease of knee-joint, ankle, &c., with this difference, that the symptoms of hip-joint disease are more obscure, less likely to attract attention, and consequently do not receive as early treatment as affections of other joints more easily examined and treated.

The progress of hip-joint disease is usually so slow, the symptoms so obscure, that it is difficult in many cases to fix the time of origin of the disease; especially if the patient be young, and the parents ignorant and stupid; or to connect that origin with an injury. In the knee, shoulder or ankle it is much easier to obtain a true history, as the symptoms

are more marked and run a more rapid course. In cases of joint disease, especially of the hip, occurring in children of a decidedly scrofulous constitution, I think that any hope of doing permanent good to the patient by excising the joints is almost out of the question. There remains a choice between two plans, either to let the disease run its course, simply stimulating and feeding the patient as much as possible, &c., or to amputate. The latter, I believe to be the only hope in such cases. Quite recently one or two cases of amputation at the hip-joint have been performed in children, where the hip-joint had been previously excised without effecting a cure. A rapid recovery was the result, and I think that instead of letting so many children, and such very intelligent children as these cases usually are, lie day after day dying by inches, amputation ought to be performed in many cases. The following case would be a good example:

A child about ten years of age, who had been suffering from hip-joint disease in its various stages for more than five years, was placed upon the table for operation. In attempting to throw out the head of the bone, the femur broke in two places at the junction of the upper and middle and of the middle and lower thirds, there being a mere shell of bone. The head of the femur was carefully removed, an interrupted Liston was applied, and for six weeks the case went on rapidly improving; the femur united firmly and the child's health improved very much. Here, however, the process of reparation came to a standstill; a slight discharge continued from the hip, gradually increasing; the belly became swollen, and the skin dry and waxy looking; in fact all those unfavorable symptoms, which are only too familiar to any one who has the care of cases of hip-joint disease. Had amputation at the hip been performed I have no doubt the child, if it survived the shock of the operation, would have made a rapid recovery.

Amputation at the hip-joint has been a very unsuccessful operation, but it must be remembered that in nearly every case, it has been performed for injury, that is a person in full health struck down by a bullet shattering the femur, or in the case of railway accidents or injuries from machinery, where the patient dies from shock of the accident and not of the operation? I have seen two cases: one where a railway porter had his thigh and leg crushed to jelly; this man, although a fine powerful fellow, survived the operation only a few minutes. Another was that of a delicate man who had previously suffered amputation of the leg, for malignant disease of ankle-joint; the disease returned in the knee some time

after; amputation at the hip-joint was performed, great care being taken not to lose much blood, and the patient made a rapid recovery.

Mr. Carr Jackson, of the Great Northern, has performed this operation with success in cases where the hip-joint had been unsuccessfully excised. Granting, however, that the rate of mortality might be rather high, would it not be much better to give the child the chance of a rapid recovery, than to let the poor thing lie, it may be six months or even five years, suffering from the continuous discharge, from bed-sores, from the daily changing of dressings, etc., to say nothing of the constant nursing required, and the great expense consequently involved. As to facility of locomotion after this operation and after excision of hip or the spontaneous cure of the disease, there is little to choose. A crutch or a pair of crutches are generally very acceptable, even if not absolutely necessary in all cases, so that that would not be an objection to the operation. Of affections of the knee-joint, the same may be said as of the hip. The disease will always be found to date from an injury, however remote, however slight; will show itself in two classes of cases, the strong and healthy, the weak and scrofulous.

In the former class, if the case receive proper attention recovery will take place in a great number of cases without an operation, rest, &c., being all that is necessary. It is from the fact that so many are neglected, that so many require operation, they either keep about until the disease has advanced too far, or they will not give the limb long enough rest for a complete recovery, and after a short time inflammation is re-excited, which becomes more and more difficult to arrest; the joint becomes destroyed and excision is called for. In this class of cases, excision of the knee-joint is very successful. I saw a case operated on by Mr. Henry Smith; seven weeks after the man walked into the theatre completely recovered. He was a strong healthy farm laborer who had neglected an ordinary sprain of the knee.

In the latter or scrofulous class no treatment will avail; you may arrest the disease for a time, and send your patient home with the idea that a cure has been effected. It may be a month or it may be several months after, you will be surprised to see the same patient turn up either at the same or, what is much more likely, at some other Hospital, with the joint in a much worse state than when you first saw it; the case goes on in spite of all treatment; the joint destroyed, there is profuse suppuration, great pain, deterioration of health; in fact the time has arrived when something must be done or the patient will die

of exhaustion. There remains one of two evils, either amputation, with the chances of a speedy recovery, or excision, with certainty that even if the patient does recover, he must first spend many weary weeks, if not months, in bed, and then perhaps when there was hardly any life in him undergo secondary excision or amputation as the very last hope. I knew of a case where the knee-joint was excised; seven months afterwards it was excised again and then three months afterwards amputation of thigh was performed, the excision being unsuccessful. The following cases of two children about the same age lying in adjoining beds, treated and fed in the same way, operated upon by the same surgeon, afford a strong contrast, and support what I have already said.

One child was ruddy and healthy, the only abnormality being advanced disease of knee-joint following on an injury received many months before, and for which the child had not received any treatment until admitted into hospital, when the joint was excised. Exactly one month from the day of the operation the splint was removed. Firm ankylosis had taken place and there was nothing but a surface sore to show that an operation had been performed. The other case was that of a weak, whinny, sore-eyed, scrofulous child, who was admitted for disease of the knee-joint, which was excised. This case in the after treatment received even more attention than the other one, the greatest possible care being taken not to allow any movement of the limb. Four months afterward, although union had taken place, it was not sufficiently firm to allow of walking, nor do I think that it ever would be.

As to the mode of excising the joint, some of the surgeons make two lateral incisions with a transverse joining them, and after removing the ends of the bones, bring the inside and the transverse incisions closely together with sutures and leave the outside one open for a free discharge of pus. The splint usually used, was a back splint with foot-piece interrupted beneath the knee-joint by means of two iron bows, one on each side. Sometimes a small trap door was made underneath. By these means the joint could be dressed without the slightest motion. Other surgeons prefer a single incision across the limb, opening directly into the joint, or rather where the joint ought to be. Different kinds of splints, more or less expensive have been devised, but nothing can answer better than an ordinary interrupted back splint with a foot-piece, bandaged carefully up to the knee and down to the knee. Strips of lint soaked in a solution of carbolic acid formed the usual dressing; when union had taken place, a

plaster of Paris bandage or a gutta-percha splint was applied and the patient sent to a convalescent home. With regard to other affections in and about the knee-joint, such as loose cartilages, inflammation of Bursæ, etc., there was nothing special in their treatment.

Progress of Medical Science.

SUDDEN DEATH IN PUERPERAL CASES.

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No class of diseases that the physician is called upon to treat is invested with the same amount of interests as those incident to the puerperal state.

The sudden, the unexpected death of the puerperal patient is an accident that, more than any other that occurs in the physician's experience, appalls him, and produces a realization of his own weakness in a strife with the "dread adversary."

It is not necessary for us, then, to impress the importance of every physician so in forming himself as to the cause, prevention, and cure of puerperal accidents, that he shall be able to give his patient such counsel and such treatment as will best conduce to her welfare by enabling her to pass through the process of child-birth, and the critical period following, with the least possible danger. It is certainly our duty as well as our interest to search out, by every possible means, the causes, however deeply hidden they may be, of these fearful accidents, and to devise means whereby they may be avoided, or, if this may not always be, whereby dangerous symptoms may be met promptly, and a fatal result prevented, if this lies within the power of human agency.

In furtherance of this end, we propose to present, in as brief form as possible consistent with clearness, the principal causes of sudden death during and after labor, as far as we are able to determine them. We shall also attempt to point out the predisposing circumstances present in each case, and offer, in conclusion, a very few remarks on the subject of treatment, especially that which is preventive.

I.—SYNCOPE.

Though this term is familiar to us all, yet it may be well for us, since it is sometimes loosely applied, to have a distinct understanding of its meaning as here used before proceeding with our remarks. The definition of this term, as given by Dunglison, is, "A complete and generally sudden loss of sensation and motion, with considerable diminution or entire suspension of the pulsations of the heart and the respiratory movements." Absence from the brain of its proper proportion of blood is the condition giving rise to the most important phenomena of syncope. The causes of this condition are innumerable, but are well classified by Copland as follows:

I. *Those causes which act more immediately on the nervous system.* We may name, as examples of

this class, depressing emotions; as, sudden terror, anxiety, disappointment.

II. *Those which affect chiefly the vascular system.* Examples: advanced heart disease, loss of blood, sudden removal of pressure from large blood-vessels.

III. *Causes acting upon the heart through the nerves.* Example: offensive and nauseating odors.

Brown-Séquard has recently expressed his belief that syncope may result from contraction of the blood-vessels of the cerebral lobes from spasm, and consequent diminution of blood supply. This spasm he regards as a true reflexion, the consequence of some peripheral nerve irritation.

Let us note briefly some of the conditions which render syncope especially common and dangerous to the puerpera.

(1.) There is always a temporary prostration of the vascular system after parturition. This is to be expected when we reflect that there is almost invariably a considerable loss of blood, which sometimes amounts to a hæmorrhage. Again, there is generally a profuse secretion from the skin, induced by the parturient efforts, which is in itself prostrating. But the enfeebled circulation is due mainly to the collapse which always ensues after violent muscular efforts, intense pain, and the inordinate excitement of the heart and arteries (Hodge).

(2.) The removal by the birth of the child, of the mechanical support to the large vessels of the abdomen. We have all witnessed the occurrence of, or tendency to, syncope of the patient tapped for ascites. The artificial support seems to become a sort of necessity, and, the abdomen having become so distended by pregnancy, we have not even the natural support of the viscera. This must be substituted by other support, if we would prevent unpleasant results.

(3.) Actual diminution of the quantity of blood in the circulation, in consequence of which it becomes more difficult to keep the cerebral vessels supplied. Of course, this is especially true when hæmorrhage has occurred.

(4.) The nervous susceptibility is highly exalted after labor. This is so common an observation, and the causes of this condition are so obvious, that comment is unnecessary. The connection between nervous irritability and syncope is obvious.

(5.) In this connection we may mention, as an aggravating circumstance, that extreme mental depression which exists in not a few cases prior to and during confinement, being the result of a long-felt fear—"a presentiment," the patient calls it—that the labor will terminate fatally.

(6.) Another condition which operates unfavorably in a number of cases is that extreme muscular relaxation, and consequent dilatation, of the walls of the heart, which is the consequence of anæmia during pregnancy.

We have, then, as predisposing causes of syncope in the newly-delivered woman: 1. Increased nervous susceptibility; 2. Mental depression, or the results of it; 3. Prostration of the vascular system; 4. Diminution of blood-supply; 5. Removal of support from the abdominal vessels; 6. Weakened heart-

action, the result of dilatation.* Either of these conditions, with the presence of an exciting cause, would be sufficient to bring on syncope; but when two or more operate together, as is generally true in these cases, we should not be surprised at its frequent occurrence.

The above being conditions *favorable* to the occurrence of syncope, what are the *exciting causes*? These are so numerous that we cannot stop to mention them, nor is it necessary even were it possible. Let us, however, examine the *modus operandi* in a few cases.

The influence of position in determining the momentum of blood in the vessels is well known. Now, suppose our patient, with causes 3, 4, and 5, as numbered in our summary of predisposing conditions operating, should suddenly assume the erect position. The consequence is that an equally sudden gravitation of blood takes place, the vascular distension of the brain becomes instantly lessened, and a sensation of faintness comes on, often, it is true, but temporary and trivial in character, but occasionally, and especially in cases already much prostrated by loss of blood and other causes, it becomes fatal. And this danger is much increased, as Meigs points out, if fresh hæmorrhage should be brought about, as might very easily be done in a womb not perfectly contracted, by this sudden change from the horizontal position.

Suppose, again, with causes 1, 5, and 3 operating, any communication of a startling nature be incautiously made to the patient. We might expect to see the cheek blanch, and to feel the pulse grow feeble beneath our touch, the heart almost literally "standing still from fear." The same result may follow any *physical* impressiom, as a blow or sudden pain even of the most trivial character (Cazeaux).

Prof. G. T. Elliot thinks that in these cases fatty degeneration of the heart may frequently serve as an important factor in the causation of syncope. Hodge speaks of syncope occurring during or after labor, especially in women of an excitable temperament, "where the symptom is purely of a nervous character." Bedford records a fatal result where the "causes of the syncope was simply emotion."

But we make no attempt to trace the causes of this symptom further, believing it may almost always be explained in one of the ways already indicated.

It is not necessary to speak of the *symptoms* of syncope, which are familiar to us all; so we proceed at once to the consideration of our *second cause of sudden death*, viz.:

II.—SHOCK.

By this term we understand that disarrangement of the harmony of action of the great organs of the body, the result of a sudden disturbance of the functions of the circulatory, respiratory, and nervous

symptoms (Erichsen). The symptoms are such as result from the combination of the effects of depression of the heart's action, and interruption of the functions of the brain and nervous system. In some of its phases, shock is closely allied to syncope, and resembles it when the operating cause "effects the intimate organization and circulation of the brain"; and if depression of the vascular system should predominate over that of the nervous, we may expect to find our patient lying in a state of syncope. If, however, the nervous system is chiefly affected, the heart's action may be restored to its natural strength, and yet the patient remain insensible (Druitt).

In a large number of cases we find a certain degree of collapse after confinement. The pulse for a time, instead of being full and somewhat frequent, as it is apt to be during the process of parturition, is slow and soft, and the patient experiences a feeling of exhaustion beyond what is common and natural. Though this state is generally speedily recovered from, yet the shock may be so violent as to result fatally in a few hours, or even before the delivery is completed.

Whatever tends to diminish vital resistance, predisposes to shock. Some of the circumstances that may operate in puerperal cases are the same as those we have named as predisposing to syncope. The principal conditions may be named as follows:

1. *Great mental dependency*, the result of a dread of an unfortunate termination, or other causes.

2. *A delicate, highly-nervous organization*.—As tending to bring about an irritable state of the nervous system, we may name the excessive nausea and vomiting that sometimes occur in the last weeks of pregnancy.

3. *The existence of organic disease*, especially of the heart, brain, or kidneys. These diseases act not only by reducing the strength of the system, but also, perhaps, by damaging the quality of the blood (one of them, at least), and impairing the force of the circulation.

We will not stop to name other unfavorable conditions, as they will readily occur to you. Given these predisposing causes, we may name as more direct factors in the production of dangerous or fatal collapse: 1. Excessive severity, with or without long duration of labor. Pain to a certain extent is conservative, but, when great and long-continued, may completely prostrate or overwhelm the nervous centres. 2. Hæmorrhage. 3. Extensive contusions and lacerations of the soft parts, as perinæum and vagina, and rupture of the uterus or bladder. All these causes operate during labor, but their influence extends to the *post-partum* period. It is not necessary to enlarge on any of these points, as their mode of operation is plainly marked. 4. An additional cause of shock is found in the extensive sloughing that may follow contusions of the vagina or cervix uteri, the result of protracted pressure of the foetal head, or the unskillful use of instruments. Dr. Thomas More Madden has recently given the report of a case of sudden death from shock "induced by sloughing of the cervix uteri." (AM. JOUR. OBST., Aug., 1871).

* We do not pretend, of course, that all these conditions are present in all puerperal cases, though an examination of those cases in which syncope occurs would perhaps discover more of them present than we are apt to suppose.

He remarks that no other writer, as far as he is aware, has mentioned this cause of sudden death. Blundell treats at some length of causes which, if not identical, are certainly similar to the one in Dr. Madden's case. "Dreadful contusions and mortifications," he remarks, "are apt to occur in laborious labor, from the rude action of the hand, perhaps; from violent efforts to abstract the head with instruments; from frequently repeated but unavailing labor-pains; and, above all, from impaction of the head in the cavity of the pelvis..... By any of these causes, intense mortifications, sweeping all round the upper or inferior part of the vagina, may be produced. If these sloughs are superficial, they are less dangerous; but if they lie about and penetrate deeply, death at the end of a few hours... is not unfrequently the result, the system giving way under collapse."

The symptoms and phenomena of shock are so fully pointed out in all surgical works that we will not stop to notice them. That it may prove speedily fatal in the puerperal as in the surgical patient, is a fact no one will deny.

Having thus briefly referred to fatal collapse, and some of its causes, we pass to the *third cause of sudden death, viz.:*

III.—EMBOLISM.

Under this term, for convenience, we will include the phenomena of *thrombosis*, by which we understand the process of *clot-formation* and *embolis*, or *clot-transmission*. This is a subject which, until a comparatively recent period, was but imperfectly understood, and doubtless many cases of sudden death have occurred, both in puerperal and other patients, which were, for want of a clearer knowledge of this subject, ascribed to lesion of the heart or brain.

There is possibly now a danger of the profession running to the extreme in another direction, and of ascribing to *embolism* every sudden death that occurs. However this may be, deaths from this cause certainly do occur, and some of these cases we find among lying-in patients. Dr. Madden, to whose paper we have already referred, gives it as his opinion that "this is the most frequent cause of sudden death after parturition."

And we name, 1st. *The peculiar altered condition of the blood of the pregnant woman*. It is well known that during the latter months of pregnancy the blood differs decidedly from its normal condition, the essential, and to us most interesting, change being a marked increase of fibrine, with diminution of the corpuscles. This condition of the blood continues for some time after the occurrence of parturition.

With the large increase that we have named, the increased danger of thrombosis occurring is readily seen; and, with some of the unfavorable conditions that are often present in the puerperal state, even *spontaneous coagulation* may occur at any time.

2d. *Anemia may exist previous to confinement*, which would aggravate the hyperinosis of pregnancy, since a relative increase of fibrine is characteristic of

this condition likewise. Anæmia would also act unfavorably by inducing a flabby or relaxed condition of the muscular walls of the heart, and thus impairing the force of the circulation, which, as we shall hereafter see, favors clot-formation.

3d. *The loss of blood after delivery* acts also in these two ways, viz., by depressing the circulation, and by destroying the normal relation existing between the fibrine and blood-corpuscles, leaving the former relatively increased.

4th. *The occurrence of inflammation*, which is a quite common sequence of parturition, would still further increase the danger from this cause. Especially is this true of inflammation of the lungs, which may itself arise in puerperal cases as a consequence of embolism. When this disease exists, an overaccumulation of blood may occur in the right cavities of the heart, from the presence of the exudation preventing a free passage of blood through the lungs. The right ventricle and auricle are enfeebled by distension, and this condition, in conjunction with the increase of fibrine in the blood, leads to coagulation (Flint). A death from embolism, with the conditions of pleuro-pneumonia and the puerperal state, occurred in this city a few months ago. The patient was convalescing favorably, and, while sitting up in bed, the respiration became suddenly embarrassed, other symptoms of heart-clot were present, and death occurred in half an hour. An autopsy verified the diagnosis previously made, Dr. R. H. Cummins.

5th. *Post mortem of the vascular system*. This mode of sudden death was pointed out by Meigs as long ago as 1849.

6th. *Open state of the uterine sinuses*, facilitating the entrance into the circulation of either detached clots or particles of other foreign substances that may serve as nuclei for the collection of fibrine. Sir James Simpson has pointed out that "morbid matters sometimes pass into the circulation in the puerperal state, through the uterine veins, and are afterwards carried round with circulating mass... Some of these appear to have a direct tendency to produce coagulation, or consolidation, in the super-fibrinated and diseased blood."

7th. *Severe contusions and lacerations during labor*, by which vessels of considerable size sustain mechanical injury, and through these, if ruptured, detached clots or any foreign substance may pass into the circulation, as through the uterine sinuses. Or, a coagulum may be formed in the vessel, as a consequence of external irritation. It is a well-established fact that clotting of blood in a vessel may be caused by irritation *outside* the vessel, even the pressure of an enlarged gland sometimes producing this result. The same result sometimes follows gun-shot wounds, open sores, or bone fractures. It is only necessary to suggest that many sources of similar irritation frequently arise during the process of parturition.

8th. *Inflammation of veins*, as in the phlegmasia dolens, which is not a rare sequence of parturition.

The more common danger, perhaps, is that which may arise from the formation of a thrombus at the

seat of the phlebitis, the condition present in phlegmasia colens. A portion of this clot may become detached, by external manipulation or other disturbance, for example, pass into the blood current, and all the phenomena of embolism, followed by speedy death, are liable to occur. In the celebrated case of Druitt, a clot twenty inches long, and "with every appearance of having been formed in the femoral vein," was found curled up in the right auricle and ventricle.

9th. *Co-existing Heart Disease.*—Another condition which, should it be present, would add to the danger of embolism arising, is the co-existence of that form of heart disease in which a roughening of the valves or lining membrane exists, or in which vegetations are found, which conditions favor a deposit of fibrine. The existence, also, of dilatation would increase the liability of this deposit taking place, by weakening the ventricular contraction, and thereby diminishing the force of the stream.

IV.—PRE-EXISTING HEART DISEASE

We name as a fourth direct cause of sudden deaths in puerperal cases. We have already referred to several forms of heart disease, as being favorable to the occurrence of *certain other conditions* that act as the direct cause of sudden death. We now wish to say a few words concerning those forms of disease of this organ which may, and often do, independent of the puerperal state, produce unexpected death.

Such is the case with certain valvular lesions, as aortic insufficiency, which, although no symptom may present during life to point to the existence of organic change, sometimes causes death, and this very suddenly, the heart becoming paralyzed by overdistension of the left ventricle, which we once saw result from the sudden effort of a patient to rise in bed.

V.—HÆMORRHAGE,

Especially internal or concealed, we mention as a fifth cause of sudden death. We refer now to hæmorrhage which is of such an amount as to act as the direct cause of sudden death. Ordinary *post-partum* hæmorrhage may, and not unfrequently does, terminate life speedily; but in these cases the danger is known and appreciated by the physician, and hence death, when it occurs, cannot be said to be *unexpected*. We therefore pass this point without further remark.

Unexpected death is more liable, to result from *internal or concealed* hæmorrhage. This may occur before the completion of pregnancy, or, which is more common, during labor, before the expulsion of the fœtus the placenta becoming detached in the centre and the blood collecting beneath it, while the circumference, remains attached to the uterus. Or, if the hæmorrhage continues, the membranes may become detached over a large extent of the uterine surface. The symptoms of this accident, as pointed out by Cazeaux, may be thus briefly stated: the general phenomena that accompany all losses of blood are present; rapid enlargement of the abdomen occurs; abdomen becomes painful; abdomen becomes separated

by a depression into two prominences, the one representing the collection of blood, and the other the ovum; occasionally an obscure fluctuation can be detected; labor-pains are sometimes weakened or suspended. This, however, is a rare form of hæmorrhage, and a still more rare cause of sudden death.

We attach much more importance to that form of concealed hæmorrhage which occurs after the birth of the child. This may occur before the expulsion, but after a partial or complete detachment of the placenta has taken place, and before the uterus has ever become firmly contracted. The placenta, membranes, and clots serve as a tampon, and hæmorrhage continues without interruption, in consequence of uterine inertia. We feel justified in saying that hæmorrhage under these circumstances could never occur without the physician's knowledge of it, but from gross neglect on his part.

Firm contraction of the uterus around the placenta, however, may occur, and relaxation again speedily take place, followed by bleeding, the placenta and membranes being sometimes pushed down into the vagina, and presenting to the touch the sensation of a second bag of waters (Blundell). Dr. J. Braxton Hicks, in a recent paper, says he has met with three cases of this kind, "the membranes remaining attached to the lower part of the uterus, while the part of them towards the fundus becomes, along with a portion of the placenta, separated by the effusion of blood, which gradually pushes it down towards and through the os uteri." AM. JOUR. OBST., Feb., 1872.

But there is another form of hæmorrhage which may occur after every proper precaution has been taken. We refer to bleeding, which not unfrequently comes on as the result of secondary inertia. This may occur a few minutes, or hours, or even days, after the completion of labor, and after the accoucheur has decided that the uterus is firmly and properly contracted. The time of greatest danger is the first hour or two after the delivery of the after-birth. The discharge of blood from the vagina in these cases may be prevented by a portion of the placenta or membranes that have been left behind becoming engaged in the os; by a collection of conglua; by too great elevation of the hips; by spasmodic contraction of the os uteri, the fundus and body remaining relaxed; or by the closure of the vulva by the napkin that has been improperly placed. This form of bleeding is especially dangerous when occurring soon after delivery; and the danger is increased if the hæmorrhage should come on during the sleep of the patient. In this case it is more apt to progress to a fatal result without detection.

Some authors speak of still another cause of uterine hæmorrhage, which may come on several days after labor, viz., *congestion of the uterus*. Madame Lachapelle says she has known "a woman to suddenly perish seven or eight days after her confinement from a profuse discharge of serous blood, ... which saturated, by imbibition, the most solid tampon. The womb was soft, but not distended with blood." We have seen one case in which serious hæmorrhage, commencing very suddenly with the discharge of clots, came on after the tenth day, and which, we think,

might have proved fatal but for an immediate resort to vigorous measures. Since, however, great relaxation of the uterine tissues does not occur in these cases, it is rarely that they progress to a sudden termination of life. Such a result might be brought about by a delay in the use of remedies.

We now pass to a brief notice of our last prominent cause of sudden death, viz.:

VI.—ENTRANCE OF AIR THROUGH THE UTERINE SINUSES INTO THE CIRCULATION.

This is a subject which, until a comparatively recent period, received no study; and even now points remain which need further elucidation. The possibility of this accident occurring was first suggested by the younger Legallois, over forty years ago, his father having observed the sudden death of a rabbit after parturition, an autopsy of which revealed the presence of air in the right auricle, pulmonary artery, anterior and posterior venæ cavae, and uterine veins. The subject has since been developed by Simpson, John Rose Cormack, George May, Jr., Dr. Green, of Mass.,* and others; so that at the present day it is generally conceded that *air may enter the uterine veins after child-birth*, and the death may result from this cause.

It has long been known that air may enter the circulation after injuries or surgical operations; and that this occurs generally through the large veins about the neck, the location of which has hence acquired the name of the "dangerous region." This may happen when, from any cause, the incised extremity of the injured vessel is kept from closing; and the explanation generally received is, that during inspiration there is a tendency to the formation of a vacuum within the thorax, by which the air is drawn into the cut vein. Hence it has been noticed that air never enters the veins of the neck except during inspiration; and that during expiration air which has entered may even in some measure be expelled.

Now, when we examine the exact state of the newly delivered woman, we find conditions that are equally favorable for the occurrence of this accident. After accouchement the uterine veins are exceedingly large—"the size of a goose-quill, and some of them will admit the little finger without lacerating" (McClintock). They are also free from inosculation, and are without valves; and in a relaxed condition of the uterus are patulous.

The condition of the uterus and veins being favorable, then, how is the introduction of air brought about? The entrance of air into the vagina and uterus is the first step. Churchill thinks it may penetrate during the process of expulsion of the child, or that it may be present as the result of decomposition. Perhaps, however, it more commonly enters after the birth of the child. Dr. Adolph Rusch, after a careful investigation of the subject, has found that, by placing a multipara, whose genitals are in a normal condition, in the prone position or on all

four, air will enter the vagina, if the vulva be open. "because the intestines, falling downwards by gravity, cause a vacuum." (Dr. Barnes's Lecture, *Lancet*, Feb. 10, 1872.) He did not find this to occur when the patient was on her back or side, though we can readily imagine it might do so if the head was much lower than the pelvis, and with the relaxed and heavy state of the uterus which we find after delivery. Dr. Barnes, in a recent lecture says: "If an examination is made when the uterus is relaxed after labor, especially if the hand be introduced into the uterus, the vaginal walls are separated from their usual contact, and a channel is formed along which air easily enters. Merely turning on the side, or a little more prone, will often, by favoring a fall of the uterus forwards, produce a vacuum, into which air will rush." Now, is it not possible, during this rush, for the air to enter, not only the vagina and uteri, but even at the same time the open sinuses? Or, a large quantity having once entered the womb, a repetition of the same cause, viz., falling suddenly forwards of the uterus and intestines, might force the air into the veins. This would be especially liable to occur if the detached placenta, or a remaining portion of it with membranes, covered the os in such a way as to permit the entrance, and yet prevent the exit, of air; in other words, to act as a valve at the os.

Amussat thinks that the respiratory movements even by elevating and depressing the intestines, may operate here as at the neck, and a suction action, or "venous inspiration," be produced.

But Simpson gives another explanation of this occurrence, accounting for it in this way: "Supposing air once introduced into the uterine cavity, which in some cases may occur in consequence of the alternate relaxations and contractions of the organ following delivery (as in after-pains, post-partum hæmorrhage, etc.); and supposing further that, under the returning contractions of the organ, the expulsion of this air was prevented by the presence of a clot at the os uteri, or other such obstructing cause; it will then, under the compression to which it is subjected, be liable to be driven into the open venous orifices existing in the lining membrane of the uterus." (Works, vol. ii., p. 721.) Dr. Cormack accepts this explanation, and even emphasizes it. He says: "Should any impediment be offered, in such cases, to the free exit of air by the os uteri, must be forced into the uterine veins, were their mouths not protected by coagula."

Symptoms.—It has been found by experiment, and in the observation of cases, that there must be either a considerable quantity of air present, or that it must enter the circulation with considerable force, in order to cause speedy death. A small quantity, injected slowly, produces but temporary disturbance. The symptoms present in serious or fatal cases we abbreviate from Dr. Green's paper as follows: The patient suddenly turns pale, utters a cry of alarm, as if death were impending, and becomes insensible. Or there may be observed anxiety of countenance, labored respiration, lividity of the lips, dilated pupils, convulsions. The pulse is generally

* To whose interesting paper in the *Amer. Jour. Med. Sci.*, for Jan., 1864, we are indebted for many facts here given.

feeble, often being imperceptible. Sometimes, however, violent and irregular action of the heart is observed. Again, lividity of the face and stertorous breathing may be prominent symptoms. A cold sweat often breaks out on the face. A violent cough has been present in a few cases. In one case auscultation of the heart revealed a churning sound, completely masking the natural valve sounds.

Dr. Simpson gives prominence to the "evanescent red scarlatinoid rash over the body," which he saw in several cases, and which, he suggests, may possibly be due to a direct mixture of the introduced air with, and consequent oxygenation of, the blood in the capillary vessels.

Post-mortem Appearances.—Autopsies have been made in a number of cases in which death occurred soon after parturition from this cause. None that we have seen recorded are any more satisfactory than that of Simpson; hence we give it. The patient had been delivered of twins, hæmorrhage had occurred, with alternate contractions and relaxations of the uterus; a number of the symptoms named above presented, and the patient died in a few hours. Suspecting that death had been produced by the entrance of air into the uterine veins, "the body was opened a short time after death, because it was considered desirable not to incur the fallacy of air being present from decomposition. . . . To make the examination more certain, the abdomen was opened under water. The lower vena cava, but especially the uterine and hypogastric veins, were distended with frothy blood, and air bubbled up through the water when any of these tubes were opened. The larger veins of the extremities were in the same state" (*op.cit.*) Nothing is said of the heart in this case; but of nine cases, narrated by Mr. George May, Jr., air was found in the heart in five. In one case the "right auricle was distended with air. Hardly a trace of blood existed in the heart." In another, in which the autopsy was made before the body was cold, the heart appeared distended, and "on opening the right auricle a quantity of air escaped with a sort of little puff, and the organ was at once reduced to its proper dimensions" (*Am. Jour. Med. Sc.*, Oct., 1857, from *Brit. Med. Jour.*, June, 1857). In cases recorded by other observers, the heart has been found distended with frothy blood.

The proximate causes of death in these cases is a point upon which authors differ widely. The following points seem to us to embrace the most rational, and are perhaps the most generally accepted, views of the profession.

1st. Distension of the heart by air, or air and blood beat into a spumous mass.

2d. Consequent imperfect closure of valves.

3d. Inability of the heart, on account of these conditions, and from the presence of frothy blood in the pulmonary artery, to propel a sufficient quantity of blood to the lungs.

4th. Consequent diminution or loss of healthy supply to the brain and nervous system.

These views are not inconsistent with the opinion of Gross, who attributes death to "a want of suffi-

cient oxygenated blood in the great tripod of life—the heart, lungs, and brain."

The above-named six causes—viz., syncope, shock, embolism, pre-existing heart disease, hæmorrhage, and entrance of air into uterine sinuses—account for a very large proportion of sudden deaths that occur during or soon after parturition. There are, however, a number of minor causes that may operate in rare cases to bring about this unfortunate result. Among these we may mention *pulmonary œdema*. There are a number of conditions not infrequently present in the puerpera that may give rise to this result. We may name among these, degenerative lesion of the kidneys; anæmia, with dilatation of the heart, both conditions predisposing to serous transudations; general œdema of pregnancy, which, as Meigs says, renders the patient prone to effusions into the pericardium and lung substance; and the long continued recumbent position favoring, especially when there is a low condition of the system, hypostatic congestion, which precedes lung infiltration, from which speedy death by apnoea may result.

Again, Dr. Madden has reported a case of sudden death resulting from *rupture of a varicocele of the ovarian vein*. Dr. Simpson has seen death occur from *rupture of a hepatic abscess* during labor, and another from *peritoneal fissures on the uterus*, from which fatal bleeding took place. Cazeaux points out the danger of death being produced during labor by the *rupture of a large aneurism*. He likewise thinks death may result from the occurrence of severe *hæmoptysis* or *hæmatemesis* during the violent throes of a second stage of labor; and Blundell relates a case of death from hæmorrhage consequent on *rupture of pulmonary vessels*. The same author gives the history of another case of instant death during labor, in which a *post-mortem* examination revealed a *laceration of the right ventricle of the heart*.

Treatment, especially that which is Preventive.

1st. We believe in the teaching which Hodge enforces, that the woman should be delivered on the bed on which she is to lie during the puerperal period, which plan avoids the exhaustion, syncope, hæmorrhage, and other evil consequences which may follow her removal from one bed to another after confinement.

2d. Let her also be in the dorsal position at the close of a second stage of labor and afterwards, which, in addition to many other advantages, lessens the probability of air entering the uterus, and hence the uterine veins.

3d. A point suggested by our friend Dr. Hupp we believe an important one—viz., remove all pillows from the head and shoulders immediately after the expulsion of the child, which obviates any tendency to syncope, and may in some cases prevent hæmorrhage, by diminishing the force with which the blood flows to the uterus.

4th. We believe much danger will be prevented by adopting Crede's method in removing the placenta. Even during the expulsion of the child, instruct the nurse to grasp the fundus of the uterus, and follow it down as it contracts, keeping the hand

in position until the accoucheur has given the necessary attentions to the child. Let him then, during the first contraction that occurs after the escape of the infant, "embrace the fundus and the superior part of the anterior wall of the uterus with the entire right hand placed transversely; then press downward and backward, assisting, if necessary, with the left hand. Under this pressure the placenta and membranes are detached, then engage in the uterine orifice—sometimes even escape suddenly from the vagina, just as a cherry-seed escapes when the cherry is pressed between the thumb and finger." The advantages of this method are an early expulsion of the placenta, with no probability of retention occurring at any time; a firm contraction of the uterus is ensured, and thus hæmorrhage and the entrance of air prevented.

Dr. G. Chantreuil reports five hundred and forty cases in which this method was adopted, and not a single case of hæmorrhage or placental retention occurred. In five hundred and eleven of these, the placenta was removed within six minutes, and in more than one-half within three minutes, after the birth of the child (*AM. JOUR. OBST.*, Aug., 1871).

Professor Parvin, who has published an interesting paper on this subject, says: "Since pursuing essentially the practice advised by Crede, I have not had a single case of hæmorrhage, nor have I had a single case in which the placenta was not delivered within, at the most, ten minutes after the birth of the child" (*Am. Practitioner*, Sept., 1871).

5th. After the placenta is expelled in this way, let an assistant grasp the uterus, and thus keep it contracted until the bandage is applied. If this is not done, and coagula collect, let them be carefully removed, and also *all* of the placenta and membranes.

The womb should be firmly contracted before the bandage is applied; and all will agree that it is wise to remain with the patient at least one hour after the birth of the child. Yet these rules, especially the last, are often neglected, and many physicians can recall cases of violent, if not fatal, hæmorrhage as a consequence.

6th. Many eminent physicians, especially among the French, have adopted the practice of invariably administering a good dose of ergot immediately after the child is born. We are inclined to regard the practice a good one, and particularly with multiparæ.

7th. We are decidedly in favor of the bandage, and believe the reasons generally given for its use are sufficient, while the objections, when it is properly applied, amount to *nil*.

8th. We are likewise a believer in the practice which restricts the patient to low diet for a few days, because of the peculiar excitability of the system at this time; and the predisposition to violent reaction. Cases, of course, occur in which it is wise to depart from this practice.

9th. Symptoms of shock, syncope, hæmorrhage, etc., must be met with appropriate remedies as they arise.

10th. See that all causes of excitement and mental disturbance are carefully avoided, and keep

the patient in the recumbent position for at least two weeks. Hodge advises that she pass the greater part of a month in this position, and we believe the advice good. Churchill says that "far more mischief results from premature exertion than from all errors in diet added together.

Because a large majority of women pass through their confinement without any unlooked-for difficulty, and convalesce without disease or accident, and because very many women of the laboring classes, after being delivered, perhaps, by some ignorant old woman, are permitted to be out of bed, on the fourth or fifth *day*, and are even sometimes at the wash-tub, or other laborious employment, within the ten days which the more refined puerpera is expected to pass strictly in the recumbent position, and all this without any apparent * impairment of health—because of these things, we are apt to become careless, leaving our newly delivered patient too much to her own will, instead of giving her proper caution and instruction, by heeding which a life of torment, or even death itself, may be prevented.

We would urge, then, that the physician should, in all cases, give full and explicit directions for the care of his patient, and insist on these being carried out fully, seeing to it that the nurse shall be the *servant*, and not the *mistress*. Nor is it easy to sufficiently impress the puerperal patient with the danger of premature exertion, since serious accidents are comparatively rare. Women do not like to lie in bed when they feel that they are not sick; but it should be insisted upon, since it is much better that ninety and nine should submit to this inconvenience, and reap the benefit of it, than that one should perish from want of proper care.

A few words as to the *treatment of cases in which air has entered the veins*, and we have done.

1st. Remove clots or other obstruction at the mouth of the womb which may prevent the free exit of any pent-up air. Resort to pressure, and any other proper means that may be necessary to bring about a firm contraction of the uterus.

2d. Resort to artificial respiration, which by keeping up the action of the heart, may lead to the propulsion of the spumous blood through the capillaries. Electrization of the phrenic nerve has also been used.

3d. Always keep the patient in the recumbent position, which promotes the flow of arterial blood to the brain. Pressure upon the abdominal aorta, or ilia, and upon the axillary arteries, has also been recommended for this purpose.

4th. Opening the right jugular vein is also recommended by surgical writers; in the hope of directly relieving the right side of the heart of an excess of venous blood.

5th. In addition to these means, brandy, diffusible stimulants, and all the remedies usually administered in syncope, are generally appropriate.

Preventive Measures.—Deliver the patient on her back. Give a good dose of ergot as soon as the child

(* But *only* "apparent," since uterine diseases and displacements are quite common among laboring women.

is born. Practise Crede's method, already referred to. Compress the uterus after the expulsion of the placenta, as directed, until the bandage is applied. Allow no clots to collect in the uterus. Direct the patient to keep the thighs approximated. Abridged from *American Journal of Obstetrics*, August, 1872.

THE THERAPEUTIC VALUE OF THE MURIATE OF LIME.

In the *Edinburgh Med. Journal* for July Dr. Begbie has an elaborate memoir upon the therapeutic value of muriate of lime, in which he gives a review of the English literature on the subject as well as his own experience, which he states to have been large. He says that, as stated long ago by Dr. Beddoes, the salt is of very great value in the chronic diarrhoea of children, associated with feeble appetite, anæmia, enlarged belly, and hectic symptoms. He also adduces much testimony as to its remarkable efficacy in cases of scrofulous taint with enlargement of the cervical glands, confirming this testimony by his own experience. In such cases he has seen the most brilliant cures under its use, after the complete failure of iodine, cod-liver oil, and all the other orthodox remedies. In some cases it requires to be taken for a long time, in some instances, even for months, before its beneficial effects are seen; generally, however, the glands begin to soften and lessen in size after a few weeks, and the general symptoms consentaneously to improve. The salt has a disagreeable, mawkish taste, to which patients generally soon become accustomed, especially when the drug is taken in milk. Dr. Begbie also affirms that the chloride is of equal value in acquired and hereditary scrofulous adenitis. He states that he has used it with great benefit in *tuberculosis mesenterica*. In Paris he saw it used many years ago by Cazenave with asserted success in lupus. The dose for an adult is from ten to twenty grains three times a day, gradually augmented to thirty grains, unless symptoms of local gastric disturbance are developed. The Doctor is partial to the old solution of the *Edinburgh Pharmacopœia* as a ready means of administering the drug. To young children the commencing dose is from two to six grains. It is best administered in milk, shortly after meals, although it may be given with impunity in an empty stomach.

CHLORAL IN PUERPERAL CONVULSIONS.

In the *Dublin Journal of Medical Science* for June, 1872, Dr. McDowell details a case of puerperal convulsions and mania, in which chloral seemed "to act like a charm."

TREATMENT OF SPERMATORRHOEA.

The occasional introduction of a catheter as large as the urethra will take, is often of the greatest service; it should be passed into the bladder and allowed to remain for five or ten minutes, according to the tolerance of the patient; its mechanical pressure helps to unload the congested capillaries and small vessels of the urethra; its contact deadens

and destroys the extreme sensibility of the urethral nerves, and renders them less susceptible to the influence of slight excitants; whilst, by stimulating the muscles, it provokes their contraction, and so renders material assistance in emptying the larger veins. A silver catheter is the best instrument for the purpose, as it exerts firmer pressure than an elastic bougie; and, as the urine can be drawn off through it, the patient will not require to micturate for several hours, which is a point of some importance, as the urethra is often very tender after the passage of an instrument for the first few times. The frequency with which it should be employed depends upon the amount of discomfort its presence occasions; and if the pain be great, it should not be left in more than a few seconds, lest rigors, swelled testicle, etc., be occasioned. Sometimes the urethra is *extremely* sensitive, and much pain attends the use of the catheter; but this is an additional reason for persisting with it, though a smaller one may be employed at first, so as to cause less pain. I have sometimes found that smearing the catheter with blue or calomel ointment, or with half a grain to a grain of nitrate of silver rubbed down in an ounce of lard, to be of use in obstinate cases; but I prefer the blue ointment to anything I have yet tried. Some camphar, extract of opium, belladonna, etc., may be combined with these ointments, if thought desirable. Care should be taken that these applications do not reach much beyond the curve of the instrument, and it should be thoroughly oiled before using it. The over secretion of mucus is always checked by the use of the catheter, whether armed with ointment or not.

Cold bathing, cold douches, etc., should not be employed on going to bed. The ordinary bath in the morning does good; but cold applications at night should be forbidden, as the reaction which follows them will increase the local circulation, and so cause congestion and erection of the penis, and thus increase the probability of emissions.

Not only must the position assumed in sleep be attended to, but undue warmth in bed avoided, whether by using very soft beds or too large an amount of clothing. The bowels should be carefully regulated, to prevent any accumulation within the rectum; and the urine examined from time to time, so as to detect an excess of uric acid, the presence of oxalates, etc., which may render its passage irritating to the hypersensitive urethra. Over distention of the bladder must, at all times, be guarded against, and the patient warned to pass urine on waking in the morning, lest he doze off again with a full bladder, which is one of the most certain provocations of erection and emissions.

Before commencing to treat this affection constitutionally, it is generally necessary to allay the digestive disturbances, which are so common and often so severe, by giving such remedies as may be applicable to the condition of the patient either with or without the more special medicines. By neglecting to do so, we may not only add to the dyspeptic troubles and obtain no benefit from the drugs given, but a valuable medicine may do harm and be brought into dis-

repute, in consequence of its being administered at a time when the stomach cannot tolerate it.

Internally, I have found astringents of more use in this disorder than tonics; or they may be combined. Gallic acid, the dilute mineral acids, especially the sulphuric, may be given. Tincture of matico will often be of service, and more so, in my experience, than any other plant rich in tannin, as it appears to act upon the genito-urinary tract rather than upon the bowels, as is often the case with the others.

Ergot is one of the most valuable remedies for this affection, and the liquid extracts of the *Pharmacopœia* is a very efficient and convenient form for giving it; whilst the dilute sulphuric acid can be added, if thought advisable.

When the urethra is very sensitive, and the passage of urine painful, small doses of copaiba are often most comforting; or the other oleoresins may be tried if it disagree; but none of them, in my opinion, is equal in value to copaiba when it can be borne.

I am not disposed to regard strychnine in these cases with very great favor; when there is much irritability of the nerves, I believe it often adds to this; but when this is subsiding it may be of use as a tonic; so may quinine or iron, but in no other way: I have never given the tincture of iron in the enormous doses (from one to two drachms three times daily) recommended by some, and so I cannot speak personally of its value in such large quantity.

Cantharides, phosphorus (except the dilute phosphoric acid), and the so-called aphrodisiacs, do harm by acting as stimulants to the nervous system generally, and therefore to the local nerves. Cantharides, also, by its action upon the bladder is, especially when given in large doses, a very injurious drug in these cases. For the same reason I disapprove of local blistering; while the sore left by the blister acts, moreover, as a source of irritation, and adds to the liability of emissions.

Belladonna, in my hands, has proved to be an uncertain remedy; in some cases it has appeared to do good by allaying irritation, whilst in others there were no beneficial results from it. The dryness of the throat, disturbance of vision and diarrhoea, which are often caused by it, constitute an objection to its employment in full doses, and without them its value is very questionable.

Camphor is a most useful drug; three or four grains made up into two pills, with half a grain or a grain of opium, and one or two of aloes, have more frequently allayed irritability and prevented emissions than anything I have yet tried. Opium alone does not succeed as well, and a large dose is necessary, so that the untoward symptoms sometimes produced by it are more likely to be incurred.

I have tried chloral in a few cases, and with very great advantage; in doses of fifteen or twenty grains at bed-time it has answered its purpose admirably.

Bromide of potassium, in thirty or forty grain doses, will sometimes be of service; but it seems to me a less certain remedy than chloral, which I am disposed to regard as one of the valuable agents we

possess for these cases, though as yet my experience of it is limited.

Suppositories vary much in their action, whatever drugs they may contain occasionally they answer well, but often they do not lessen, and I am not sure they do not sometimes increase, the irritability of the parts.

Galvanism I have not employed myself; but in the few instances where I have known of its being tried by others, it has seemed to me to do more harm than good, by adding to the nervous irritation.

Lastly, as to cauterization by the *porte-caustique*, I need scarcely say than I am strongly opposed to this method of treatment; for, if my view of this disorder be correct, this instrument can relieve it in no other way than as the passage of the catheter does. I do not believe that ulceration or other morbid conditions of the ejaculatory ducts are the causes of seminal losses. We have no evidence that these pathological conditions exist, except, it may be, in very rare instances; and if so, the application of nitrate of silver to the prostatic mucous membrane in every case of nocturnal emission must be unnecessary; and in spite of its alleged harmlessness, I consider it to be a dangerous treatment. I have known two persons die from the effects of the *porte-caustique*, and I have seen others suffer severely from its employment. This may not be to the usual result; but I do say that the application of nitrate of silver to the urethra, whether in stick or in strong solution, is at least a very sharp remedy, and will often produce violent inflammation, and sometimes lay the foundation of a stricture or of a chronic irritation of the bladder.

If, then, caustic be applied on an incorrect surmise as to the condition of, and its effects upon, the prostatic mucous membrane and ejaculatory ducts, it is not only an unnecessary, but, in my opinion, an unsafe method of treatment.—*Gascoyne—British Med. Journal.*

ON THE TREATMENT OF ASTHMA.

Mr. George Gascoine, surgeon to the British Hospital for disease of the skin, says in the *British Medical Journal*:—

In the summer of 1870 I was summoned to a lady suffering from an acute asthma, to frequent attacks of which she was subject. Nothing had been omitted in her previous treatment, which was simply palliative. She was recognized as constitutionally asthmatic, and little hope was entertained of permanent amendment. The asthma first occurred on the subsidence of nervous symptoms a few years previous. It had not, as far as I am aware, any organic basis. There was observable on the legs an eczematous eruption. I directed that the chloroform liniment of the *British Pharmacopœia* should be briskly rubbed into the chest for an hour's space, if possible; and this was done daily by a very efficient attendant, who had sufficient intelligence to comprehend and carry out the treatment. Very early much relief was experienced. On the return of her physi-

cian. to town at the end of three days she was already so much changed for the better that he directed the treatment to be continued. From that time it consisted in the daily repetition of the rubbing process for a month or nearly so, without aid from medicine, and with little restriction to diet. Beyond the information I received that she was daily improving, I had really little or nothing to do with her professionally after one or two visits. Under the hands of her attendant she speedily got rid of the asthma. The patient went out of town in the autumn and enjoyed perfect health and spirits. She took much walking exercise, with exposure, in the cold of the ensuing winter; and, what is very singular, two years have since elapsed with no return of the asthma.

Before giving directions as to how this treatment should be carried out, I will speak as to the *rationale*. Counter-irritation, especially by blister, issue, and moxa, are of such well-established repute in the treatment of asthma that I need not dwell on them; but, besides this, a jolting vehicle, anything that leads to displacement of the air stagnant in the viscles, is proved to give relief in many instances. I should advise, then, that the frictions should be made with such roughness as the case admits. Slight blows with the palm of the hand or the end of a towel on the ribs are quite allowable; and the friction should be extended to the front of the neck at the lower part, where the vagi enter the chest. I do not think that the composition of the liniment need trouble us, provided it be warm and work easily. Anything like Roche's embrocation would answer very well.

I am not without some experience of asthma, and I am persuaded that the present method will be found a valuable addition to our therapeutic means. If proved not to be novel, it must be conceded that it has fallen into utter neglect.

HYPOPHOSPHITES IN THE TOOTHACHE OF PREGNANCY.

Dr. Sterling believes that the toothache so common in pregnancy results from the abstraction from the blood of the salts requisite for the construction of the bones of the fœtus, and accordingly recommends one and a half grains of hypophosphites of lime, soda, and manganese, daily.—*Nashville Jour. Med.*

MORPHIA AND CHLORAL.

Dr. R. H. Fisher speaks very highly of the combined use of morphia and chloral for relief of pain.—*Med. News*, July, 1872.

A SIMPLE SUBSTITUTE FOR THE POULTICE.

Apply thick wet cloths as dressing and cover with waxed paper. Greased paper answers this purpose pretty well also, and can always be readily obtained.

CARBOLIC ACID IN HYDROCELE.

In the *American Practitioner* for July, Dr. P. E. Sandidge reports a case of double hydrocele cured by

injections of two drachms of Calvert's solution of carbolic acid (No. 5), with a small quantity of water, after the failure of tincture of iodine.

POWDER STOMACHIQUE.

Take of Powdered rhubarb..... 3 grms.
Prepared chalk..... 3 "
Powdered opium 25 centigr.

Mix and divide into 12 packets.

One powder half an hour after meals.—*L'Union Medicale*.

INFANTILE PARALYSIS.

Prof. Gross ordered at the clinic for a pale, diseased stunted child suffering from infantile paralysis:—

℞ Tinct. ferri chloridi, f ʒ j.
Tinct. nucis vomicee, f ʒ ij.
Hydrargyri chlorid. corrosiv., gr. iv. M.

S. Take five drops three times daily in a table-spoonful of sweetened water.

℞ Ung. hydrargyri, 3 iij.
Cerat. simplicis, ʒ v.
Veratriæ, gr. vj. M.

S. Put a piece the size of a marrowfat pea, twice a day, over the entire spine and along the back of the limbs.

Apply the ointment gently at first, until the parts become accustomed to its use. Wash the child every day with tepid water containing a table-spoonful of common salt to the quart. After bathing, wring the end of a towel out of cold water, and with it strike the entire surface of the body quite smartly, until the skin is reddened. This treatment to be continued for a month; at the end of which time his mother was directed to bring the child back.

ENLARGED TESTICLE.

Dr. D. Hayes Agnew used the following for indolent enlargement of the testicle, supposed to be strumous.

The man was ordered to take ʒ ss. ol. morr., with gr. xv. syr. ferri iodidi after each meal; also, arsen. iodidi gr. 1-18 t. d. Locally to apply.

℞ Ext. bellad.,
Ung. hydrarg.,
" iodine,
" adipis, aa ʒ ij. M.

If the ointment irritates the skin, it may be further diluted.—*Med. and Surg. Reporter*.

PROF. GROSS'S TREATMENT OF GOITRE.

Treatment will consist in stimulating the absorbent vessels, although the application of agents of too stimulating a character must be avoided, otherwise irritation will be produced, and the mass will be enlarged instead of diminished. The neck will be thoroughly washed at least once in the twenty-four hours with hot water and soap, and immediately afterwards a portion of the following ointment will

be applied to the surface of the tumor and well rubbed in.—

℞ Ung. hydrarg. biniodid..... 3 j.;
Cerat simp..... 3 v. M.

The patient will take internally the *Liquor iodinii compositus*, gtt. viij., in sweetened water, three times daily.

A piece of thin flannel and oiled silk will be worn around the neck. The diet will be regulated and all red meats avoided. Six grains of blue mass in combination with a grain of ipecac will be given now and then at bedtime to regulate the secretions.

ASTHMA.

Dr. Hale, of Kentucky (*Chicago Medical Times*, Sept. 1872), uses the following prescription with much success, in asthmatical cases: R. Ether. sulph. $\frac{3}{4}$ iss.; Tinct. lobelia, $\frac{3}{4}$ i.; Tinct. stramonii, Tinct. opii. aa 3 iv. M. S. Teaspoonful every hour or two until relief is obtained.

MANAGEMENT OF OBSTINATE PRURITUS.

Mrs. J. G. Brown, Resident Physician, Ill. Woman's Hospital, (*Med. Exam.*, Aug. 15, 1872), speaks highly of the sulpho-carbolate of zinc in cases of obstinate pruritus of the vulva. In one particular case, the vulva, after being thoroughly bathed with tepid water, was washed twice daily with a solution of the sulpho-carbolate of zinc containing half a drachm to the ounce of distilled water, the parts being allowed to dry without wiping. She was much improved at the end of a week. During the second week the application was made once daily, on retiring at night. At the end of the third week the pruritus was wholly relieved.

BLISTERS IN PNEUMONIA.

Dr. C. J. B. Williams, in speaking of pneumonia says: "My experience has taught me to put great faith in large blisters, both in asthenic pneumonia and bronchitis, and I am confident that I have seen many lives saved by their means. Instead of being lowering they give a salutary excitement to the circulation, and the copious serous discharge which proceeds from the skin tends to relieve the congested lung without wasting the red blood, that is so necessary to sustain the functions. Small blisters tease as much as large ones, and are far inferior in the relief they afford."—*American Practitioner*.

ON THE USE OF THE BOWL DURING DELIVERY.

Dr. J. Mathews Duncan, in a paper read before the Obstetrical Society of Edinburgh, recommends the use of an ordinary wash bowl in the place of cloths for the purpose of catching the discharges which come from the vulva during labor. It has the advantage of cleanliness, is inexpensive, guards against cold by the removal of the liquor amnii, blood, meconium, and clears the air of noxious germs and decomposing animal matter; and enables the attendant to estimate the quantity and quality of

the discharges.—*Boston Medical and Surgical Journal*.

EIGHT CHILDREN DELIVERED AT ONCE.

In the *Boston Medical and Surgical Journal* for August, a case is reported in which a woman was delivered of eight children at once—all alive—three boys and five girls.

INK SPOTS may be removed from colored fabrics by a concentrated solution of sodium pyrophosphate, which dissolves the ink slowly without affecting the color of the fabric.—*Am. Journal of Pharmacy*.

ABORTIVE TREATMENT OF BOILS AND WHITLOW.

Dr. Simon de Forges (*Rev. de Therap.*) advises the topical use of camphorated spirits as an abortifacient in boils and whitlow. In the former case the boil is to be rubbed eight or ten times by the finger dipped in the alcohol. He asserts that it is rare that after this treatment a boil goes on further towards suppuration. In cases of whitlow he advises the patient to dip the finger for some ten minutes in camphorated spirits. This almost always gives great relief of the pain, and often cures the complaint.

TREATMENT OF CANCRUM ORIS.

C. S. Kittredge, M.D., of Oakland, Cal. (*The Western Lancet*), late Assistant Physician at the Nursery and Child's Hospital, Randall's Island, N. Y., publishes 19 fatal cases of this formidable affection—which is a malignant form of ulcerative stomatitis—induced in children under five years of age, predisposed to tuberculosis. The duration of this disease is from six to sixteen days, running a most rapid course when commencing in the cheek or throat, but somewhat slower in its progress when commencing in the gums. The disease demands prompt and energetic attention. He commences with the chlorate of potassa, in from five to ten grain doses every four to six hours, and continues it during the whole progress of the disease. The mouth must be frequently washed with a weak solution of liquor sodæ chlorinatæ, 3 i. to water $\frac{3}{4}$ xii., and after mortification has commenced, a pledget of soft linen, wet in this solution, should be constantly kept between the sore and the adjacent tissue. Tonics and stimulants should be freely given on account of the great prostration, and iron with bark or quinine in as heavy doses as the child will bear, and strong beef tea in place of solid food. Out of 67 cases of stomatitis treated during the year, there were 19 deaths, or 28 per cent. Of the fatal cases, 12 were males and 7 females. The average age was 2 years and 11 months. In 16 cases, the primary disease was rubeola. Fourteen autopsies were made, and in every case, tubercles were found in great abundance. In 13 cases the tubercles were in the lungs, and in the other, the mesentery was filled with miliary tubercles. He remarks in conclusion that cancrum oris has a close connection with tuberculosis; and believes that it can exist only in children of a tuberculous diathesis.

PREDICTION OF SEX IN UTERO.

T. J. Hatton, M.D., Resident Physician to Long Island College Hospital, (*New York Medical Journal*, July, 1872), in substantiating the assertion advanced by Tyler Smith and others, that not only can pregnancy, in its advanced stages, be determined by auscultation, but also the presentation, position and sex of the foetus *in utero*,—submits the following essential points from the clinical records of seven cases as a proof of the practicability and reliability of this rule: Foetal pulsations, heard below a horizontal line, dividing the uterus into two equal parts, denote vertex presentation; above it, breech presentation; below it, and to the right, second position. When the foetal pulsations number 144 per minute, it is a female; 124 per minute, male. As deviations from this rule, or average, will doubtless be encountered, he ventures to add that a variation of *six beats per minute*, from 124 upward or from 144 downward, will not endanger a diagnosis, provided auscultation be practised in the *ninth month of pregnancy*. In his cases this rule was the sole guide, and without a single failure.

INCONTINENCE OF URINE IN CHILDREN.

Mr. Holmes Coote recommends for this intractable affection the administration of creosote in one-minim doses, three times daily, combined with assa-fetida and rhubarb pill, of each two grains.

RECIPE FOR PREPARING BEEF-TEA AND SOUP FOR THE SICK.

Make the cook understand that the virtue of beef-tea is to contain all the contents and flavors of lean beef in a dilute form; and its vices are to be sticky and strong, and to set in too hard a jelly when cold.

When she understands this, let her take half a pound of fresh-killed beef for every pint of tea she wants, and carefully remove all fat, sinew, veins, and bone. Let it be cut up into pieces under an inch square, and set to soak for twelve hours in one-third of the water required to be made into tea. Then let it be taken out, and simmered for three hours in the remaining two-thirds of water, the quantity lost by evaporation being replaced from time to time. The boiling liquor is then to be poured on the cold liquors in which the meat was soaked. The solid meat is to be dried, pounded in a mortar, and minced so as to cut up all strings in it, and mixed with the liquid.

When the beef-tea is made daily, it is convenient to use one day's boiled meat for the next day's tea, as thus it has time to dry and is easiest pounded.

Some persons find it more palatable for a clove of garlic being rubbed on the spoon with which the whole is stirred. I prefer a bit of celery heated in it. Good soup is that which is most like this beef-tea, and is a very digestible article; bad soup, that which least resembles it, is to be avoided as poison.—*Chambers on "Indigestion."*

ALCOHOLIC PARAPLEGIA.

Dr. Wilks, of Guy's, in a paper in the *Lancet*, endorses the conclusions lately published by Dr. Handfield Jones, in reference to the production of epilepsy and other nervous diseases by the abuse of alcohol. Dr. Wilks has met with cases where the alcohol, acting chiefly on the spinal chord, made paralysis the leading symptom, and he combats in his own trenchant style the notion that it is not safe to suddenly leave off the accustomed stimulus. "No harm," he says, "but only good will ensue from its withdrawal." He considers that the same rule should apply to all persons.

Some striking cases are mentioned, in which the absolute and instant withdrawal of alcohol snatched the patients from the very jaws of death. One was a professional man, who, after drinking hard, became so ill that he took to his bed, had epileptiform attacks, ate nothing, and was constantly retching, his wife standing over him administering brandy and champagne from time to time to keep him alive a little longer. Dr. Wilks succeeded, after several attempts, in inducing his wife and two medical attendants to stop every drop of alcohol. When this was done the patient soon cried out for drink; but, after imploring in vain for some time, he was violently sick, and then sank into a sound sleep. Upon waking he took a little beef tea, in a few hours ate some solid food, and within a week was back again in his practice.

The purport of Dr. Wilks' paper is to draw attention to the fact of paralysis, occurring as a result of alcoholism; and therefore that when a medical man is called in to see a case of this kind, he should remember intemperance in drinking as a possible cause, just as he would if he found an enlarged liver.

If the affection should turn out to be in any way peculiar in its pathology, it will certainly deserve a distinct appellation; but even should the morbid changes in the cord, together with the resulting symptoms, resemble what is seen in other forms of paralysis, he would still recommend the adoption of such a term as alcoholic paralysis as significant of its cause, for we are warranted in so doing by the use of the expression puerperal, syphilitic, or uræmic epilepsy (eclampsia) in reference to the origin of the fits when arising under special circumstances.

CARBUNCLE AND BOILS TREATED WITH NITRATE OF SILVER.

In both the forms of anthrax—carbuncle and boil—the application of the solid nitrate of silver affords the most speedy means of cure. One looks back, with feelings almost akin to horror, at the heroic plan of treating carbuncles, sometimes enormous in their size, by crucial incisions; cases, too, occur to one's memory in which, in spite of this operative procedure, the carbuncle still went on increasing in size; where, in fact, the incisions not only did no good, but positively did harm, by the shock to the patient and the increased risk of pyæmia. A lecture upon this subject by Sir James Paget,

appeared in the *Lancet*, Jan. 16, 1869, it which he strongly condemned this mode of treatment.

The treatment he recommends is at first a piece of emplastrum plumbi with a hole in the centre; then resin cerate on lint, covered over with a large poultice (half linseed and half bread); and then, later, the careful application of carbolic acid lotion, or some other deodorizing fluid. With these measures must, of course, be combined cleanliness, fresh air, and a careful regulation of diet.

I have found, however, that the duration of carbuncle is very materially diminished, and its extension cut short, by preceding this treatment by the application of nitrate of silver freely over its surface, repeated, if necessary, once or twice after intervals of two days. Immediately after the application, a small soft pad of dry lint is applied and retained by means of a piece of strapping and a bandage. The after-treatment is the same as Sir James Paget recommends, except that the poultice will be unnecessary, and the internal administration of iron or other tonic will generally be found useful.

Boils are treated in the same way, and will seldom require a second application of the caustic.

The *modus operandi* of the application of nitrate of silver in these cases seems to be the energetic stimulation, and consequent contraction, of the capillaries and small arteries of the part, whereby engorgement is diminished, the vessels are placed in a condition for returning to a healthy function, and morbid exudation is diminished, arrested and removed.—*London Practitioner*.

INTERNAL HÆMORRHOIDS TREATED WITHOUT OPERATION.

During the last year, Dr. John Beekman treated at the New York Dispensary eleven cases of internal hæmorrhoids, all occurring in females, and all treated without operation. In every case, the only internal medication consisted in the following formula:

℞ Pulv. sennæ,
Potass. bitartrat.,
Pulv. sulphuris.....aa 2 oz.
Pulv. zinziberis..... ½ oz. M.

This preparation is designated in the Dispensary Pharmacopœia as *Pulvis Sennæ Compositus*. The dose, as employed by Beekman, was a teaspoonful of the powder, in molasses, every morning. The local treatment consisted in the use of the following ointment:

℞ Ext. Belladonnæ,
Plumbi acetatis.....aa 2 dr.
Acid tannic..... ½ oz.
Ung. adipis..... q. s.

Ut fiat unguentum.

A small mass of the ointment to be introduced within the anus thrice daily, after a thorough ablu-tion of the parts with cold water.

The duration of the treatment was quite various, bearing a direct ratio to the severity of the case, ranging from a week to about five weeks. As far as could be ascertained, recovery took place in every

instance, and no case of relapse has thus far come to Dr. Beekman's notice. A few of these patients suffered from hæmorrhage, but not to an excessive amount. Instead of the ointment above mentioned, Dr. Beekman uses, in private practice, suppositories made up of the same ingredients, with the exception that cocoa butter is substituted for the simple ointment—each suppository containing two grains each of the extract of belladonna and acetate of lead, with four grains of tannin.—*Medical Archives*.

COLD-WATER TREATMENT OF TYPHOID FEVER.

Dr. E. Scholz, it is stated (*Deutsches Archiv f. Klin. Med.* ix.), since the year of 1868, when he introduced the cold-water treatment of typhoid fever into the Bremen Hospital, has treated 125 patients—82 men and 43 females—the majority of whom were aged between 15 and 30 years. Of these cases, five, or about four per cent., terminated fatally. The temperature of the cold baths into which the patients were immersed varied from 8° to 16° R., according to the season of the year, and according as the medium temperature of the patient's body throughout the day exceeded or fell short of 39° C. In severe cases, in addition to the cold bath, cold applications were made to the chest, and over the abdomen. The leading circumstance which, according to Dr. Scholz, contraindicates the employment of cold baths, is the occurrence in any case of intestinal hæmorrhage, because of the necessity of the patient being then kept in perfect quietude; but even in such cases the application alone of ice to the abdomen will be found beneficial, and may be continued until the debilitating effects from the loss of blood are recovered from. It may also be remarked that the cold bath is inadmissible in those rare cases where the fever attacks individuals of broken-down constitutions, drunkards especially, and the temperature of whose bodies continues depressed, seldom rising to 39° C. Dr. Scholz relates a case of this kind, in a girl 19 years old, who was destroyed by the cold bath. She was affected with emphysema of the lungs.

The statements of Dr. Scholz as to the beneficial soothing influence of the cold water treatment in typhoid fever upon the functional nervous centres, and upon the digestive and cutaneous systems, are fully borne out by the history of the cases that were subjected to it. It is said by Dr. Scholz, that of five cases attended with intestinal hæmorrhage in which the remedy employed was the liq. ferri sesquisulph., only one terminated fatally. In some severe cases of the fever, occurring mostly in delicate females, on the eighth or tenth day of convalescence there was experienced severe dental hyperæsthesia.—*Centralblatt f. d. Med. Wissenschaften*, February 24, 1872.

COLD WATER TREATMENT OF ABDOMINAL TYPHUS IN THE ROYAL JULIUS HOSPITAL AT WURZBURG, DURING THE YEARS 1870-71.

Dr. F. Riegel states in the (*Deutsche Archiv f. Klin. Med.*, ix., 1871), that the cold-water treatment of abdominal typhus was marked by considerable mildness. The temperature of the "half

baths" which were employed, was 20 R., hence the patients were enabled to remain in them for ten minutes at a time, without experiencing any especial inconvenience. They would often, as they lay in them, take a shower bath of cold water. These baths were continued until a temperature of 39.5° was attained. In the intervals between the baths, cold compresses were applied over the abdomen. These were found to be preferable to bladders filled with ice, the latter from the powerful impression they made, caused immediately an extreme contraction of the peripheral bloodvessels, so that the cooling effect caused by the diminished circulation at the surface of the body was, it is probable, productive of injury rather than of good.

Of one hundred and fifty-six typhoid patients treated during the years 1870-71, in the hospital—including only the well-marked severe cases—only seven proved fatal; while in former years, before the adoption of the cold water treatment, in the same hospital, the mortality among the typhoid cases reached 20 per cent.

It was observed by Jurgensen and Hagenback, so, also, by Dr. Riegel, that in his typhoid patients, very often there occurred a severe burning pain in the soles of the feet, so that there appeared to be a connection between this system and the cold water treatment. Intestinal hemorrhage was of less frequent occurrence than under the former expectant treatment. It is here, perhaps, that is shown the beneficial action of this mode of treatment.—*Centralblatt f. d. Med. Wissenschaften, No. 27, 1872.*

THE CANADA MEDICAL RECORD

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EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.R.C.P. LOND.

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ARTIFICIAL LIMBS.

By request we lately visited the Victoria Drug Hall and Truss Factory, Victoria Square, Montreal, to inspect some specimens of artificial legs and arms, manufactured by Dr. Eneas, after the patent of Mr. Condell, of New York. We confess to have the very highest opinion of these limbs, several of our friends having made use of them and experienced from them a comfort and ease which was hardly to have been anticipated. Both the arm and the leg are extremely light, the former not exceeding, we should judge, a pound and a-half, while the latter is about five pounds, a matter of no small importance. In arrangement they are simple, efficient and very ingenious, yet of sufficient strength to be able to withstand

even more than the ordinary wear and tear which is likely to follow work imposed upon an artificial extremity. The arm is especially ingenious in construction, enabling as it does, the wearer to do a variety of things which, with other artificial arms which we have seen, was impossible. A gentleman in Montreal has had one of them on for several years, and states that he is able to write a fair hand, dust his coat, cut his meat, carve, drive, and do a hundred other little things, some, perhaps, of no very great importance, but all of which tend to make one's life more pleasant. We understand that Dr. Eneas has arranged with the patentee, so as to allow him to manufacture them in Montreal. Our friends throughout the country who may have patients in need of either limbs or arms, would do well to note the contents of this article and communicate with Dr. Eneas, the proprietor of the Victoria Truss Factory, where there is constantly on hand, and made to order, every kind of surgical appliance.

PROFESSIONAL REMUNERATION.

We honestly believe that, as a rule, there is no class men, so poorly recompensed for services rendered as the profession of which we are a member. When one thinks of the years passed in preparatory training, before entering upon the purely professional part of our education, and the time occupied in the acquisition of the latter, it is but right to assume that as the profession is a liberal one and deals with the lives of the human family, a remuneration commensurate with the importance of services rendered, will, at all events, be the reward. Twenty-two years ago, when the tariff, which at present is followed by the large majority of the profession in Montreal, was adopted it was possible when one obtained a fair practice, not only to live comfortably upon it, but likewise put past a little for a rainy day. Now, such a thing is impossible. It is not then to be wondered at that the question of professional remuneration is strongly forcing itself upon the attention of the Medical profession throughout the entire length of the Dominion. The rapid rise which has taken place in every necessary of life, not to say anything of the increased price demanded for surgical instruments and medicines, is an ample reason why a revision of the tariff already alluded to should be made. We are glad, therefore, to know that in Montreal, after a great deal of work and enquiry, a Committee have named an increased scale, and that it is quite possible that within this month their report will be brought before the Medico Chirurgical Society of

Montreal for discussion. We earnestly hope that in this matter there will be union, and especially that the seniors of the profession will not hold out on the old tariff and claim their right to charge as they please. If this doctrine, which we have heard more than once broached, is admitted, it cannot be confined to the question of fees, and the *cordón* that keeps the profession united will be loose indeed. This is a matter of really far more moment than would appear upon the surface, and to the younger members of the profession it is of vital importance.

TO OUR SUBSCRIBERS.

We sent in our last number accounts to all our city subscribers, and in the present issue, we enclose bills to our country subscribers. We will take it kind if both will promptly attend to the small memorandum.

PERSONAL.

Dr. Trenholme of Montreal, professor of midwifery and diseases of women and children, in Bishops College, has been elected a Fellow of the Obstetrical Society of London.

Mr. Holmes Coote, the eminent London surgeon, has been obliged to desist from all professional duties, owing to continued ill health.

Mr. G. B. Shaw has been selected by his fellow students to deliver the valedictory address upon behalf of the graduating class, at the convocation of the Medical Faculty of Bishops College, on April next.

Reviews.

A PRACTICAL TREATISE ON URINARY AND RENAL DISEASES, INCLUDING URINARY DEPOSITS.—Illustrated by numerous cases and engravings, by William Roberts, M.D., Fellow of the Royal College of Physicians, London; Physician to the Manchester Royal Infirmary; Lecturer on Medicine in the Manchester School of Medicine. Second American from the second revised and considerably enlarged London edition. Philadelphia, Henry C. Lea, 1872. Montreal, Dawson, Brothers.

It has been said, that excessive book-making is one of the evils of the present age. The assertion is quite true of too many of the books that are presented to us. We have no such opinion of the work before us by the accomplished Lecturer on Medicine in the Manchester School. It belongs to a type of authorship, which we wish, for the sake of the busy

practitioner, were much more common than it is. This is the American reprint from the second English edition of Dr. Robert's work, the first having been brought out in 1865, and exhausted three years ago.

Our author divides his work into three parts. In the first part, the Physical and Chemical Properties (including urinary deposits) of the urine in health and disease, are treated of. In his treatment of this division of the subject, Dr. Roberts displays good judgment, for while all those chemical researchers into the composition of the urine, and the rate of excretion of its several ingredients, which have been proved to be of clinical value, are amply elucidated, the reader is referred to such treatises as those of Parkes, Vogel and Neubauer, for the more purely chemical and physiological investigations in this line which have not as yet been shown to be of practical value. The various methods of examining the urine for clinical purposes are given, and the significance of its many and diverse changes are amply explained and illustrated. Dr. Roberts describes a very convenient form of arrangement for keeping the necessary apparatus for testing the urine. It consists of a circular stand somewhat after the manner of a cruet-stand, on which are arranged in two tiers the various reagents, glasses, test-tubes, burette, flask, urinometer stirring rods, pipettes, &c. This part of the work is amply illustrated with engravings of the microscopical appearances of the various deposits to be found in the urine. These are compared with, and distinguished from the numerous extraneous matters which accidentally find their way into it.

In the second part of the work, those diseases of which the chief characteristic is an alteration of the composition of the urine, are treated of under this head. Diabetes Insipidus, Diabetes Mellitus, Gravel and Calculus, and Chylous urine each receive their share of attention. Dr. Roberts has come to no definite conclusion, and framed no theory and as to the pathology of Diabetes Mellitus. The following are the words with which he concludes this part of his subject: "Although we appear to be approaching an exact knowledge of the pathogenetic elements of glycosuria, it is yet manifestly impossible, in the present state of science, to frame a comprehensive and clear theory of diabetes. It would seem highly probable that diabetes consists proximately in some disturbance of the destiny and functions of the amyloid substance (animal dextrine) of the liver. But this disturbance may be due originally to disease far away from the liver itself, in some part of

the nervous circle which controls this function. Occasionally, as in traumatic cases, it is possible to place the finger on the primary lesions; but in the immense majority of cases, we are left in a sea of conjecture. Further researches, conducted in the light of past and future physiological discoveries, can alone reduce these conjectures to order and certainty."

With regard to the treatment of Diabetes Mellitus our author is a firm believer in the efficacy, as a palliative and in some cases curative measure, of a restricted diet from which starch and sugar are rigidly excluded, and is of opinion that the discredit into which this method of treatment has come in some quarters is due to the slovenly and incomplete manner in which it was carried out.

Dr. Roberts' experience of the skimmed milk treatment as proposed by Dr. Donkin, is decidedly unfavorable. His verdict with regard to the rennet and pepsine treatment is also unfavorable.

Opium is the only drug which has seemed to him to be of any service, its good effects seeming to be due, not to its direct influence on the course of the disease, but to its anodyne properties. He says: "If no restriction be placed on the diet, opium in doses of from 6 to 20 grains a day, has always in my experience had the power of reducing the flow of the urine by about one half; that is to say of bringing it down to five or eight pints, and this without increasing its density. But notwithstanding this amelioration in the state of the urine, the downward progress of the disease is not arrested, and the effect of the drug seems attributable to its deadening influence on the appetite rather than to its specific power of checking the formation of sugar. When opium was given to patients under a restricted diet, it did not in my hands exhibit the least power of lessening the flow of urine or the excretion of sugar. Its value depends on its power of inducing sleep, and of allaying the dolorous sensations and irritability which constantly torment diabetic patients." Dr. Roberts has seen no good effects from peroxide of hydrogen, or ozonic ether.

Dr. Roberts makes no mention of a method of treatment which we should like to see tried in this disease, viz., the use of electricity. The more than suspected nervous origin of the disease, together with the fact that glycosuria has been induced by injury to the base of the brain, and that in many cases where no traumatic origin of the disease is known, degenerative changes are found post mortem in the *pons varolii* and *medulla oblongata*, would seem to warrant a trial of this powerful therapeutic agent in

the diseases of the nervous system. The application of the constant current of medium intensity to the brain and spinal cord, especially its upper part, and to the sympathetic and pneumogastric nerves would seem to be the form of electricity most likely to be useful. Experience is the best and perhaps only reliable test of the usefulness of these suggestions. *Semmola* has found both temporary and permanent results from faradization and galvanization of the pneumogastric nerves. In some of the cases both the quantity of urine and sugar were diminished. It is, however, to be remarked that it would be difficult to galvanize the pneumogastric without also affecting the sympathetic.

In the third part of the work organic diseases of the kidneys are discussed at full length and in a very able and impartial manner. The subjects treated of are Bright's disease, acute and chronic. Suppuration in the Kidney, Pyelitis Pyonephrosis, Concretions in the kidneys, Hydronephrosis, Cysts and Cystic Degeneration of the kidney, Cancer, Tubercle, Benign Growths and Entozoa. There is a concluding chapter on anomalies in form, position and number of the kidneys.

A capital feature of this book, and one which makes it especially valuable to the practical physician is the large number of illustrative cases which are interspersed with the descriptions of the various diseases treated of. We are glad to see that this plan of introducing cases is becoming much more general than it used to be with writers on medical subjects. This is a notable feature in the articles of some of the writers in *Reynold's System of Medicine*.

In conclusion, we can heartily recommend Dr. Roberts' work to our readers, as one which they will read with both profit and pleasure. For the publishers we have no words but those of commendation. The book is well bound, the paper good, and the impression of the type admirably clear.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF WOMEN, INCLUDING THE DIAGNOSIS OF PREGNANCY. By Graily Hewitt, M.D., London, F.R.C.P., Professor of Midwifery and diseases of Women, University College, and Obstetric Physician to the Hospital; Honorary Fellow of the Obstet. Soc. of Berlin; Vice President of the Obstet. Soc. of London, Philadelphia Lindsay & Blackiston; Montreal, Dawson Brothers.

The third edition of this admirable work now lies before us, and after perusal, we find in it a great improvement on its predecessors as regards the general

arrangement of the work. As might be expected from the increased experience of its author and the abundant opportunities afforded him, much new matter has been added to the present volume. The arrangement has been, to some extent, altered, and these alterations are to be commended, as thereby the usefulness of the work is greatly increased. Twenty new illustrations have been added, which being mostly original, will greatly facilitate the study of many difficult questions of Gynecology. On certain points upon which there are still considerable differences of opinion, the author has expressed himself somewhat decidedly. At the present time great attention is paid to the mechanical means of relieving uterine disorders, and Dr. Hewitt is one of the strongest advocates of that system, regarding it as more than a mere speculative theory. In his preface he states that it commends itself to his judgment as true, as he has found it to be in conformity with daily observations for the past 5 or 6 years, and, therefore, feels himself warranted in giving so decided a public expression to his views. With the exception of uterine growths, Dr. Hewitt believes all other conditions are, in some way or other, caused by, or in connection with some form of displacement, for he states that certain alterations in the form of the uterus, such as are called flexions, are often the cause of inflammation instead of the inflammation being itself the starting point of these uterine conditions.

In the diagnosis of the various uterine disorders, great attention has been paid. Dr. Hewitt has endeavoured to render this easy of accomplishment, for his descriptions and symptoms of disease are as carefully and minutely rendered as to at once become apparent as the work of a diligent and painstaking observer.

In the treatment of the pedicle, after ovariectomy, (of which operation he records ten successful cases out of fifteen) he has devised what he considers an improvement on the buckle clamp. This consists of a No. 4 ring pessary bent into a proper shape, which can be adjusted and altered to suit the requirements of each case, and which in the future he intends to use exclusively in all cases where the pedicle is brought to the surface.

Space will not allow us to enlarge further upon the different sections of this work. We recommend it to all, as it treats of a class of diseases unfortunately too common, and which do not receive that attention from the profession generally that their importance and connection with other disorders should demand. This probably is due in a great measure to the delicacy of the sex; for in many

cases they wilfully mislead, so that the attention of the practitioner is not specially directed to the true cause. As it is necessary for all obstetricians to be master of these conditions we advise them to obtain this work, emanating as it does from the pen of one who is a thorough master of his subject.

The work is published by Lindsay & Blakiston, of Philadelphia; in Montreal by Dawson Brothers. It is excellently got up, and contains about 730 pages of reading matter.

Medical Items and News.

REMEDY FOR CATARRH.

The German correspondent of the *Chemist and Druggist*, writing from Dresden, notices from Dresden, notices a new remedy for that most annoying of complaints—a cold in the head. The application has been found very successful, and is very simple and not unpleasant to the patient. It is prepared in the following manner:—

A wide-mouth glass bottle is filled with amianth, or, better, with cotton, and then the following mixture is poured on, so that the cotton or amianth is perfectly saturated with it.

Acid carbolie puris, 80 grs.

Liq. amon. caustic, 96 grs.

Spts. vini rect., 80 grs.

Aq. distillat, 40 grs.

The vapours are drawn into the nose frequently during the day, and now and then inhaled into the mouth. J. P.

The London *Lancet*, that attempted to be witty at our expense, has recently shown its correct knowledge of Canada, by speaking of "the Province of Toronto."

There are six hundred and forty-three medical students attending the classes of the University and College of Surgeons in Edinburgh, this year.

DIED.

At St. John, N.B., on the 11th September, 1872, R. Hamilton Livingstone, M.D., aged 30 years.

At London, England, on the 1st October, from facial carbuncle, James Chatterton, M.D., Assistant Surgeon, 2nd Battalion Scot's Fusileer Guards, aged 28 years. The deceased served in Canada during the latter part of 1869-70, taking part in the Red River Expedition, and was gazetted to the Guards on his return to England. His many friends in Canada, deeply lament the premature death of one so full of promise.

At Cheltenham, England, on the 15th October, 1872, John Gardner, F.R.C.S., E., aged 82 years, Assistant Surgeon in the Grenadier Guards at the battle of Waterloo.