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Original Communications.

Meningeal Hemorrhage. By GEORGE A. BAYNES, M.D., C.M. (Read before the Medico-Chirurgical Society of Montreal.)

On the night of the third of March, I was called on to see W. H. B.; not being at home the messenger went for Dr. Scott, who saw him after having recovered from what was said to be a faint or fit. The doctor ordered him to bed and to receive a cup of tea.

On my return at 11 p.m., I went to the club, and saw him; he was lying in the stranger's room, on pillows; he was much excited, being very talkative and throwing his legs about. On enquiring, I found that he had had one fit or faint early in the evening, losing consciousness completely, but recovered almost immediately. After some little time he was dressed and placed in a cab to be taken home, when he said that he felt another faint coming on him, and only had time to step from the cab when he fell prostrate on the sidewalk. Calling some of the waiters, he was carried into the club again, and placed in the stranger's room, where I found him. After conversing some little time we dressed him and drove to his rooms in Bleury street; I gave him a purge of calomel and jalap, after which he soon fell asleep but was very restless all night.

March 4th.—Saw him both morning and evening to-day; at both visits he was dull and very heavy looking, dozing at intervals; complained of pain at the epigastrium and nape of the neck, the latter he attributed to the fall after getting out of the cab the night previous. In the evening I gave him a couple of cathartic pills, the purge of the night before not having operated. I remained with him till he was sound asleep.

March 5th.—Saw him at 11 a.m., he still had a very dull, listless appearance; bowels moved once; complained of dyspepsia; he had been subject to indigestion for some time, for which I had previously prescribed. He asked for more of the pills I used to give him, they were

℞ Ferri redacti gr. 40.
Zinci Valerianatis gr. xx.
Strychnin gr. j.
Glycerine gr. s. Ft. mass and divide into 20 pills, one three times a day after meals.

I also gave him a dose of bromide of potassium at night.

March 6th.—Much better to-day, but still very nervous and having a presentiment of another fit; walked about the room very restlessly from one seat to another; continued the pills with a dose of bromide at night.

March 7th. Very much better to-day, more lively; went out for a drive; slept well the previous night; continued the same treatment.

March 8th.—Still improving; walks with greater ease than previously, but still is nervous and fears another faint; I proposed a consultation. Asked him who he would have; said Dr. Campbell. I called on the doctor and made an appointment for the morrow; continued the same treatment with the bromide but stopped the strichnine pills.

March 9th.—Dr. Campbell saw him in consultation with me to-day; he told him he had slight congestion but he would recover, he must take this as a warning and to be very guarded in the future as to his living. Ordered him to continue the bromide of potassium with spt of chloroform, to get another purge of five grs. of calomel in a cathartic mass; he walked very fairly to-day but rather weak. Dr. C. pronounced his heart sound.

March 10th.—Much improved to-day, more lively; walked, talked, ate and drank well; went out for a drive; complained of no pain whatsoever; continued the same treatment.

March 11th.—Saw him this a.m, he was remarkably well, went out driving again to day, and wanted a beef steak, but I allowed him nothing but slops. In the evening about 10, I was sent for to see him as he had another fit; I went at once but he had just recovered as I entered the house. The messenger did not wait for me but went for Dr. Campbell who could not attend, so the messenger went on to Dr. Howard, who arrived almost immediately after I did, and prescribed:

℞ Ammon, bromid ʒ ii.,
Capsici tinct. ʒ iv.
Syr limonis ℥ j.
Aquæ ad ʒ vj.

A tablespoonful every hour until quiet or sleep ensues.

March 12th.—Very little better to-day, weak and nervous, and has a presentiment of coming evil; wished to make his will. Saw him in the evening, was a little quieter; left him asleep; all evening he complained of pain in the back;

continued the bromide of ammonium and capsicum mixt.

March 13th.—Still very nervous and restless, so much so that I proposed to him to see Dr. Howard again, which he consented to; complained of great pain in back of the neck and spine, for which I dry-cupped him, it seemed to give him instant relief for he fell into a quiet sleep and continued so all night; stopped the capsicum mixt. to-day and returned to the bromide of potassium and sprts. of chloroform.

March 14th.—Dr. Howard saw him in the afternoon; on examination found his heart healthy, only excessively nervous. After the doctor left he talked quietly, and walked without faltering; seemed very much relieved in mind when his heart was pronounced healthy; examined his urine, but found nothing remarkable; continued the bromide and chloroform.

March 15th.—Better to-day, went out for a drive, ate, slept, and walked well; in the evening complained of pain in his back, for which I dry cupped him again.

March 16th.—Still continues well; went out driving again; ate, and walked well; still had a little pain in the back of the neck, this pain was aggravated at night so I cupped him again, affording the same relief which lasted all night; this evening for the first time he complained of pain in the back of the thigh; continued the bromide and sprts. of chloroform.

March 17th.—He was marvelously well all day; talked of starting for England the following week; drove himself out with a pair of horses; seemed very strong and well, no pain in the back; ate well, and walked as if nothing was the matter, but said he had a little rheumatism in the back of the thigh.

March 18th.—I was summoned at 1.30 a.m. to attend him in another fit; on my arrival I found him dead.

Family history was good, he had served in the Madras army for about seven years. He had told me he had suffered while in India from an attack of hypochondriasis, which was very troublesome both to himself and his medical attendant; also had attack of jungle fever. While here I had treated him for some minor complaints, but with these few exceptions he had had uninterrupted health.

Autopsy.—This was performed by Dr. Roddick—Demonstrator of Anatonny, McGill University. Thirty-six hours after death: weather cold; cadaveric rigidity very marked; body well nourished and fat; muscular system greatly developed; uniform purple discoloration of all the posterior part of the body.

Chest.—I may mention here en passant that the left pectoral muscles were absent. Lungs large; filled with dark blood; slight nodular fibroid induration at the apex of the right lung; largest and hardest in the left apex.

Heart not distended with blood, substance flabby; of good color; no opacities or discoloration visible in its cut substance, nor under the endocardium, nor in the fleshy columns; three or four minute white patches of atheroma in the substance of the fibroid ring to which the semilunar segment and anterior mitral segment are attached; no roughening of the surface of the walls on either side of the heart; no disease in fact in the heart except the patches of atheroma above mentioned; lining membrane of the ventricles and arch of the aorta deeply stained of a mahogany red from imbibition; some atheromatous patches without calcareous matter under the lining of the aortic arch, no aneurism of the thoracic or abdominal aorta.

Liver large, venously congested, not corrugated nor indurated; both kidneys normal, one much congested throughout and of dark red color like liver; spleen healthy.

Head.—Little blood escaped in cutting the scalp and calvaria; encephalon filled the scull, the membranes were closely applied to the brain, the dura mater normal, not injured at all by the saw or chisel; convolutions of the convexity and sides of the brain flat, and considerable transparent fluid in the sulci and meshes of the pia mater; extensive extravasation of blood at the base of the brain in subarachnoid space, most abundant and forming in thickest layer upon and around the pous varolii, and in the neighborhood of the upper and basilar surface of the medulla oblongata, and upon and around the crura cerebri. The extravasation extends forward in the pia mater, as far as the extremity of the olfactory bulbs, backwards upon the under surface of the cerebellum to its posterior border. It is much thinner at both places than at mid-base.

On opening the Sylvian fissures, blood is found extravasated in them, more in the right than in the left side, and also along the longitudinal fissure from the optic commissures in the course of the anterior cerebral arteries; this blood is

nearly all black and coagulated, some more recent looking redder and not perfectly coagulated lies on the surface of the larger solid extravasation at mid-base (*i.e.*, on and around the pons varolii.) The membranes cover all this blood, and none of it is effused into the cavity of the arachnoid; the blood is seen to extend down the vertebral canal forming a black envelope around the spinal cord, in the situation of the cerebro-spinal fluid. Having removed the brain, a few detached superficial small extravasations, as if from minute ruptures, are seen on the sides of both hemispheres, especially over the posterior lobes, but not reaching the upper surface of the brain.

On slicing the cerebrum, the punctæ vasculosæ are not large nor numerous; the cerebral substance was not at all congested; both lateral ventricles filled with transparent serum of the color of weak claret and water; a long narrow black coagulum extends from the central cavity of the right lateral ventricle in the course and along the external border of the choroid plexus down into the middle cornu and back into the posterior cornu; the same appearance was found in the left lateral ventricle; the third ventricle is filled with a small black blood clot, which can be traced thence into the fourth ventricle, which cavity is also filled with coagulated blood. In none of the ventricles is there any discernible laceration of the brain substance—the commissures of the third ventricle being intact; no extravasation was found in the substance of the brain anywhere.

On examining the blood vessels of the brain at the base, many of them presented opaque white patches of atheroma. On the left vertebral artery a circumscribed white fusiform dilatation of the vessel is visible, the enlargement is found on slitting up the vessel to be chiefly one of thickening of the coats at this point; a similar one is seen at the anterior part of the basilar, and upon slitting up the basilar an irregular opening was found about the middle of its course and on its right side in the neighborhood of where it gives off transverse branches. We found it difficult to decide if this opening had been made by the accidental cutting off with the scalpel one of these branches; but there appeared to be some pouching of the walls when the vessel is examined from the inside. No sack is found attached to the basilar artery, but that vessel is covered by and occupies about the centre of the thickest extravasation.

On opening the spinal membranes, they were found blackened by extravasated blood within them throughout the entire length of the cord. On removing this, and slitting up the dura mater vertebralis, a thin layer of coagulated black blood was found completely enveloping the cord down to the cauda; no blood was extravasated outside the spinal membranes.

A case of Wasting Palsy, by J. D. CLINE, B.A., M.D., Assistant House Surgeon Montreal General Hospital. (Read before the Medico-Chirurgical Society of Montreal.)

Wm. Brownlow, aged 14, was admitted into the Montreal General Hospital under the care of Dr. Roddick on the 6th of March, 1875.

Patient's family history is good. Mother and father and several sisters and brothers living. No history of any similar affection in the family previous to this. Patient has always been somewhat delicate, suffering frequently from bilious attacks. Has had full power and free use of his limbs till the time of the present attack in August, 1872; has never worked hard. In January, 1868, he received a kick from a horse on the forehead, from which injury he was laid up for six months. He was stunned but soon recovered consciousness. Suffered from great pain in his head during his illness. There is a scar and depression in the bone, marking the seat of the injury, directly over the frontal sinus. He recovered perfectly from this, and has never suffered any inconvenience from it since. For the last three years there has been a patch of eruption, herpetic in character, 3 or 4 inches in diam., over the point of his right shoulder. On the third of August, 1872, after exposure in the morning to wet and cold, he had a headache. Next day (Sunday) was very sick, had a bad headache and vomited. On Monday was better, but in going to a brook for some water felt his legs getting weak, and suddenly fell; in a few minutes got up and walked home, stayed in bed that day but at night, in walking across the floor, again fell. Slept well, but in morning could not walk at all. Could stand alone, but on attempting to move, fell. His limbs were very itchy for a day or two. This itchiness was soon replaced by a severe steady pain from his buttocks to his feet, which lasted about six months. The pain was relieved by hot fomentations. Had no pain in his back, and no sense of constriction around the abdomen. His

legs kept getting weaker, and he soon noticed them wasting. He thinks his legs have not grown weaker or smaller since the first year of his illness. His general health has been good throughout; the right leg has been stronger than the left throughout. He insists that he could use his legs as well as ever until after his exposure to cold and wet. There is a patch of rather long hair in the front of his right thigh which has grown since his leg began to grow weak.

Present condition.—The upper part of his trunk and upper extremities are well developed, but his lower extremities are little more than bone. He cannot walk at all. His mode of progression is by his hands, his heels being close together and resting against his buttocks, and held there by a strap passing around the legs and over his neck. In this way he is very active, and can go up and down stairs with considerable ease, proving the strength of his arms and upper part of his trunk. He can stand for a short time with the aid of a table. The only support that he gets from his limbs is from the right one. His appearance when standing is peculiar from the great exaggeration of the lumbo-sacral curve, which is due to atrophy and weakness of the erector-spinal muscles as well as of the gluteal muscles. This is noticeable almost to the same extent when lying. The curvature cannot be reduced by pressure, as if the vertebræ had become moulded into this position which would be assumed from the first in order to throw his centre of gravity as far back as possible. When lying also the limbs are rotated inwards. The measurements of the limb are as follows :—

Around left buttock over groin	15½ in
" right " " "	17 "
Left thigh, 3 in. below trochanter	10½ "
Right " " " "	11½ "
Left thigh, 7 in. " "	9 "
Right " " " "	9¾ "
Left thigh, just above knee	8 "
Right " " " "	8½ "
Calf of left leg at largest part	7⅛ "
" " right " " " "	6½ "
Right and left feet at instep are equal	7½ "

Thus while the right buttock and thigh are larger than the left buttock and thigh, the left leg is larger than the right; yet all the muscles are atrophied. The muscles of the right thigh are in the greatest state of preservation, and retain considerable tonicity, especially those composing the quadriceps extensor. The vastus externus is the largest and hardest of all. All the rest of the muscles of both limbs communicate a dead flabby sensation to the feel. The muscles, flexors and extensors of the left leg, though larger than those of the right, are relatively more atrophied than those of either thigh. The roundness of the buttocks is lost. The spinal muscles are softer than they should be, the right ones more than the left. He cannot stoop nor raise himself from the stooped position without resting his hands on his knees. The abdominal muscles are soft, the left more so than the right. The abdominal walls cannot be kept retracted for any time without fatigue and a sense of soreness. The recti are the tensest when these muscles are contracted. All the movements of the right thigh, flexion, extension, abduction and adduction, are more easily and powerfully performed than those of the left. These movements of the left are done with a flail-like action. It takes considerable force to antagonise the extension of the right limb. Flexion and extension of the right foot and toes are lost entirely while they are feebly retained in the left leg. Fibrillar tremors are noticed on pressure with the finger in all the atrophied muscles, and in those on anterior aspect of thigh without any irritation. He never has and does not now suffer from cramps or twitches in the muscles. The response of the muscles to the galvanic stimulus is proportionate to the degree of preservation of the muscles. On the anterior aspect of right thigh the response is most active. It is less on posterior aspect. On left thigh and leg the galvanic stimulus only produces a slight fibrillar contraction which can be felt, not seen. On the right leg it produces no effect. The right gluteal muscles respond more actively than the left, and the left spinal muscles more actively than the right. The right abdominal respond more actively than the left. Sensation is perfect in the limbs. There is no morbid sensation in the limbs. He occasionally has pain in the abdominal muscles, lasting two or three hours at a time. His limbs become readily cold. His general health is and has been throughout unimpaired. All the organic functions are performed perfectly. He has no difficulty in evacuating his bowels or bladder.

One point of interest in this case is the sudden loss of power independent of any atrophy. The cause seems to have been exposure to wet and cold. I cannot trace any connection between the affection and the kick in the head which he received four years before the onset of the disease.

The Progress of Materia Medica. By A. H. KOLLMYER, M.A., M.D., Professor of Materia Medica and Therapeutics in the University of Bishop's College, and Lecturer on Materia Medica and on Botany in the Montreal College of Pharmacy.

Koumis, or perhaps more correctly *Kumyss*, is a beverage used in the families of the people of Tartary. It resembles sour buttermilk somewhat, without being at all greasy. According to Sir George Simpson it is prepared in a very simple way, from mare's milk, which is merely allowed to stand for some days in a leathern churn to become sour. It is then bottled for use. This drink is more nutritious than exhilarating; but from the same material the Burats and the Kirghez prepare an intoxicating spirit, in which they sometimes indulge to excess. A similar preparation is said to be in use in the Orkney and Shetland Islands (Dunglison's Dictionary.) It can also be equally well prepared from the milk of the ass, as well as from that of the cow; indeed recent clinical observations have appeared to indicate that the latter is preferable to either of the others in a therapeutical point of view.

In oriental countries, Koumis has long been used as a common beverage, and men of note have, from time to time, endeavoured to secure for it a prominent place in our catalogue of remedies, and partially with success. In 1783, John Grieve, physician to the Russian army, proclaimed its invigorating properties; and in 1874, Labadie-Lagrave wrote a very interesting essay on Koumis, and extolled it as a valuable tonic in debility, and especially in phthisis.

Recently the subject has been more thoroughly ventilated through the columns of the *London Lancet*, and a number of cases have been reported where it has apparently proved a successful agent, even after every other means of treatment had failed.

The article used by the English physicians is known as Chalmer's Cow-Koumis, of which there are several qualities described as Nos. 1, 2, and 3, each differing from the other in therapeutical powers.

Dr. Myrtle, of Harrogate, reports four cases in which he gave it a fair trial, and is highly satisfied with the results. (1) In a case of marasmus, where every kind of ordinary food was vomited, and enemas of beef-tea and Champagne had been abandoned as mischievous,—two ounces of No. 2 were taken with pleasure and retained; twelve ounces being consumed each day for a fortnight, that being the only article of diet whatsoever. (2) In a case of inflammatory rheumatism accompanied by gastric irritability, all other remedies having failed, No. 2 was given to the exclusion of all other diet for five days, five pints being taken daily with the happiest results. (3) Was a case of advanced phthisis with diarrhœa and hectic fever: No. 3 acted beneficially, and for weeks formed the chief article of diet, one-third or half new milk being sometimes added to it. (4) Was a case of pyæmia, with vomiting, intense thirst, and a temperature of 105°, all food being rejected: five ounces of Koumis were taken greedily and retained, a pint and a half was consumed in twenty-four hours for six days, when the patient improved; other kinds of food were now gradually added, and the Koumis diminished; the latter alone relieved the intolerable thirst which accompanied the disease.

Cases *one* and *three* died, but they were grateful for the relief they experienced. Two and four recovered, mainly, the Dr. says, from this remedy. It never disagreed, always allayed the thirst, and was easily digested. No. 3, he remarks, if kept too long sours, besides which patients soon tire of it. When fresh he regards it as the more suitable, in all cases of fever and thirst; if these symptoms are absent, however, he prefers No. 2.

Mr. J. Willis Mason, of Regents Park, writes that he has used this remedy for three years. His first case was a lady suffering from paralysis after delivery; she was thin, weak, and anemic, all food was rejected, and there was great prostration; the catheter had to be used daily. When seemingly dying, he continues, the sparkling Koumis was given frequently in small quantities, and its good effects soon became manifest. The dry skin became moist; the catheter was no longer required, the bowels, which had not acted for many days, were naturally relieved, and the paralysis gradually improved: he considers that her life was saved by the Koumis.

A member of his own family is now taking it with marked benefit; she has been long suffering from nervous debility, anorexia, sleeplessness, sudden heats and flushes, and her assimilative powers feeble in the extreme. Ordinary medicines, and residence at the seaside, produced no good results, yet Koumis is bringing about a complete change, and he soon expects to her in see her usual health.

Mr. T. Carter Wigg, of Southminster, Essex, reports a case of heart disease with albuminuria, dropsy, thirst, dyspepsia, and vomiting of all ingesta, which was greatly benefited by Koumis, the albumen diminished while he took it, and strength and the spirits improved wonderfully. He commenced with a pint of No. 1, and gradually increased it to two imperial quarts daily from January, 1873, till the following

August, when he died. The dyspeptic symptoms disappeared in one week from its commencement, and he was enabled to take other kinds of food, but Koumis formed part of his daily diet till his death, and sometimes no other food was taken for days together. This authority considers it as a therapeutic and a dietetic agent invaluable, and admissible in all cases of dyspepsia, wasting diseases, with low assimilative powers, after shock to the system with gastric disturbance, in gastric fever, and perhaps in typhoid. Three facts appear to have been established with regard to Koumis: first, that under the use of one bottle *per diem* there ensues an appreciable augmentation of weight in the body; secondly, that all febrile symptoms disappear; and lastly, that refreshing sleep is induced, all of which will serve to promote recovery, and will assist the *vis medicatrix naturæ* in re-establishing a healthy or normal condition.

The local use of Chloral Hydrate. By CHARLES A. PEABODY, House Surgeon City Hospital, Worcester, Mass., U. S.

DEAR DOCTOR,—You will remember asking me about my experience with the hydrate of chloral, as to its external use. I have jotted down a few notes on the subject which I take much pleasure in sending you.

From all that I can learn I judge that this use of the drug is as yet comparatively limited, but I am of the opinion that it holds a valuable place and is worthy of extended trial.

I began to use chloral externally about ten months ago in Dispensary practice, experimentally. In this I was associated with Dr. E. Warner, also of the Dispensary staff.

I am sorry that I am not able to give you details of cases treated with this agent, but we did not keep a minute record of these cases, trusting rather to our impressions of its general utility to influence our choice of it as a cheap and efficient dressing for Dispensary use. Our purpose, you see, was practical rather than scientific.

It was first tried in a 5 grain solution, on a small unhealthy ulcer of the leg, with most gratifying result; the dirty unhealthy surface of the sore became clean, healthy granulations sprang up, and the ulcer was soon healed.

After this many ulcers of this kind were treated in this way, and with uniform success, they beginning at once to assume a healthy aspect and soon healing. It was found advisable, however, usually to reduce the strength of the solution to 3 grs. to the ounce of water, after the first two or three days, as it seemed to be then too stimulating.

Encouraged by this success we began to extend its use to chronic eczema, one very aggravated case of which I have in mind, which was at once much relieved, and within two weeks almost entirely cured. In this case a three grain solution was used from the first, and no other application whatever was allowed.

I have also found it to be, in varying strength, a most excellent application in cases of offensive perspiration and offensive discharge. It has not the powerful and persistent odor of carbolic acid, and is in many cases to be preferred.

In hospital practice the chloral wash has not disappointed my expectations. I have in mind two cases where its good effects were very marked. The first case was an amputation of the thigh, performed for disease of the limb. The wound was dressed with carbolic acid; the flaps did not unite at all, but the cut surfaces assumed, after a few days, an unhealthy look, and became covered with patches of membranous character. Chloral 4 grs. to the ounce was applied, and the very next day all the membranous patches had disappeared, the wound began to look healthy, and granulations were seen springing up over nearly all its surface.

The other case is in hospital now: the foot was amputated through the metatarsal bones for R. R. injury. The healing process progressed slowly for a while, and then seemed to come to a stand-still, and for two weeks no progress whatever could be detected; but the surface of the wound assumed a dirty, unhealthy appearance. Then a 5 gr. chloral wash was applied with immediate good effect. The next day the wound looked healthy, and the process of repair seems now, after three days' use of the chloral, to be fairly started into activity.

Thus, I have briefly indicated the results upon which I base my very favorable opinion of chloral as an external application. Of course, if used indiscriminately and unskilfully, it may disappoint, but it has its place, and if intelligently and judiciously used will not fail, I think, of giving very general satisfaction.

There are a few points worthy of notice in which chloral in solution compares favorably with carbolic acid; these are as follows:—

1. It does not have the unpleasant smell of carbolic acid, while it is yet a very excellent deodorizer and antiseptic, it will even, in great measure, deodorize carbolic acid itself.

2. It is a much neater and cleaner dressing than the carbolized oil which is so frequently used.

3. It does not stain or rather fix stains, as carbolic acid does; an important consideration where sheets, &c., are of any value.

4. It does not "kill granulations" as carbolic acid does, but stimulates them.

Correspondence:

(*For the Canada Medical Record.*)

TYPHUS; OR SHIP FEVER.

MR. EDITOR,—I apprehend that all young physicians favour the notion that medicine is omnipotent in the treatment of disease generally, of which fatal error, observation and experience thoroughly cure him, if he be a philosopher. He, with becoming contempt for such names as Allopath, Homœopath, Hydropath, &c., and their exclusive systems, does not abandon one figment for another, and flee from the deadly and dangerous system of over drugging, to embrace the less hurtful but effete fiction of infinitesimals. He accepts and adopts, the scientific, safe and successful practice, evolved in the expectant plan of treatment. The experience of a long medical career (my practice having ever been eclectic,) has led me to these principles; the soundness of which I will try to illustrate.

During the year 1847, "Typhus," or so called "ship fever," prevailed extensively in this city and country; carrying death and desolation in its track. The mortality in public hospitals, at the Quarantine Station, and in private practice, was as great as usual under the then ordinary and accepted plan of treatment. One solitary and note-worthy exception, both as to treatment and its results, I am desirous of placing on record, whilst one of the actors in the scene is still on the stage of life. I refer to Dr. Douglas, the Principal in Dr. Douglas' and Racey's "Ship Fever Hospital" at Beauport; where the death rate was the smallest, I have found any record of, during an epidemic.

Having applied to Dr. Douglas for the facts and figures connected with this private hospital, I subjoin the following terse and interesting record, *verbatim et literatim.*

EXTRACT FROM MY PRIVATE JOURNAL.

During the winter and spring of 1847 the accounts of the ravages made by the fever in Ireland, the prospect of a vastly increased emigration to Canada, and in my opinion the certainty of a great amount of cases of typhus, among both the cabin and steerage passengers, induced me and my partner Dr. Racey to establish a private hospital for the treatment of masters of vessels and of cabin passengers, who would naturally object to go into a crowded public hospital, and who would as naturally be refused admission into private houses.

We accordingly leased a large house on the beach at Beauport, and awaited the arrival of the shipping. Our prognostics were fully verified; vessels arrived, crowded with cases of typhus. The hospitals and sheds both at Quebec and at Grosse Isle were crowded with emigrants and seamen, and, as was expected, hotels and private houses very prudently refused to receive cases of virulent contagious fever.

Our private hospital was very soon found to be too small, and we leased in addition the large and commodious dwelling-house connected with the old breweries at Beauport. In these two private hospitals we admitted and treated during the summer one hundred and sixty-five cases of Typhus fever, of whom three died of the fever, and one of paralysis after recovery from the immediate danger of the fever.

Our treatment was extremely simple; on admission the patient was placed in a tepid bath, in which he was thoroughly shampooed and scrubbed with soap and a coarse towel, a staff of excellent and well tried nurses, clean sheets and body linen frequently changed, thorough ventilation, diluent drinks, and occasionally medicine were our modes of treatment.

We were very sparing in the use of drugs, for, though not homœopathists, we decidedly preferred administering them with a spoon, instead of a shovel.

J. DOUGLAS.

DR. MARSDEN.

We have here an admirable illustration of the success of the *expectant plan of treatment* nearly thirty years since, which speaks well for the genius and progressive spirit of its promoters. A death rate of less than 2 per cent. (as one of the cases of death could not be said to be from typhus) is almost, if not quite without a parallel.

According to Murchison,* during fourteen and a-half years, at the London Fever Hospital, the mortality from typhus was 20.89, per cent., and ex-

* Charles Murchison: Treatise on Continued Fevers of Great Britain in 1862.

cluding the cases dying within the first twenty-four hours, it was 19.56 per cent.; in 1851, it fell to 8.8; in 1860 it rose to 60 per cent. Out of 18,292 cases; from the different hospital of London, Glasgow, and Edinburgh, there were 3,525 deaths: a mortality of 18.78 per cent.

Speaking of the treatment of typhus, Lebert, one of the latest authorities, says;*

"Absolute cleanliness is to be insisted upon, both with regard to the bed, the body, and the excretions of the patient. The treatment is at the best *expectant*, as in typhoid fever and acute diseases generally, and once more I insist upon the most careful and thorough ventilation, for cold is much less to be feared than bad air. Quiet is to be maintained. As the nursing is exhaustive, experienced nurses should be obtained. Cool drinks in abundance, water, lemonade, carbonic acid water, and every three hours I give milk, broth, or small quantities of weak soup. Cold sponging is rather pleasant than useful. Cold baths at about 65° Farh. may be repeated day and night as often as the temperature rises above 102.2.° Farh.; these are not only well borne, but meet with no opposition from the patient as soon as a few have been taken.

Trousseau almost literally endorses Douglas and Racey's Practice, and says:† "We cannot cure the disease, we cannot even shorten its course; all we can do, is to be on the watch to assist nature. I repeat to you the words of Stokes, of Dublin, that *the disease cures itself.* If you keep up the patient to the fourteenth, nineteenth, or twenty-first day, he will recover. The leading indications are to sustain the vital powers by food suited to the digestive capacity of the individual, by stimulating and tonic beverages, and by wine and spirits measured out in exact quantities."

As to alcoholic stimulants, they formed *no part* of Dr. Douglas' plan of treatment. Food and not drink was his plan of treatment, and has ever been mine also. This fact I mention *pointedly*, in consequence of the fatal abuse of alcoholic stimulants in the treatment of fevers and other diseases at the present day. I shall have no burthen on my conscience "when I go hence to be no more seen of men" on this account; but, in the truthful and eloquent words of Dr. Graves of Dublin, to his pupils: "If you are at a loss for an epitaph to inscribe on my tomb, you may use these words: HE FED FEVERS."

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Quebec, Place d'Armes.
St. George's Day, 23rd April, 1875.

*Cyclopædia of the Practice of Medicine, by Ziemssen, vol. 1., page 339; Wood & Co., New York, 1874.

† Trousseau's Clinical Lectures, vol. 1, page 315; Lindsay & Blackiston Philadelphia, 1873.

P.S.—In the foregoing paper I have not touched on the etiology, symptomatology, complications, duration, diagnosis or prognosis of "typhus fever," my object being solely to lay before the medical profession what seems to me to be unparalelled success. The cases treated by Dr. Douglas at Beauport, were cases of true idiopathic "typhus," "typhus petechialis," which is a typically distinct disease from "typhoid fever." Dr. Frantz Glenard, a French physician, who was a prisoner during the Franco-Prussian war,* demonstrated the advantages of hydropathy in the treatment of typhoid and typhus fever, under Dr. Brand of Stetlin, and says:—"Out of 170 cases there was not a single casualty," but he does not say there were cases of petechical typhus.

W. M.

* "Practical Guide to Health, &c., by F. Arnold Lees," F.R.S., L.R.C.P.L., M.R.C.S., Eng., London, 1874.

Progress of Medical Science.

THE MANAGEMENT OF HEAD-LAST LABORS.

BY WILLIAM GOODELL, M.D.,

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Labors in which the head is born last are the bugbears of the physician; and well they may be, for Atropos, and not Lucina, presides over them. The tediousness of the labor, the probable ascent and possible fracture of the arms, the impaction of the head, the peril in which the child's life is placed, and the very disagreeable chance of breaking the neck, or, indeed, of leaving the head behind, present in their aggregate a very unwelcome group of complications. The chief dread of the physician is, however, the death of the child, and the length of the labor.

The causes of fœtal death in this form of labor are manifold. But, what is worse, they accumulate in proportion as labor advances, and in the end act in concert. The first, in regard to time, comes from the irregularity of the presenting part, and consists in the escape of all the liquor amnii as soon as the bag of water breaks. The next is the delay attending the expulsive stage. The other causes lie in ambush until the breech is born, and then combine with the former in making a deadly assault upon the child's life. These include the compression of the cord and placenta, the partial detachment of the latter, the embarrassment to the utero-placental circulation from the lessened size of the womb, and, finally, what is not uncommon, the long pauses between the pains. But there is yet another danger, not so generally known, which is, perhaps, the most common cause of death before delivery, and of feeble vitality or of death after delivery. When the placental circulation begins to flag, the child, unless at once delivered, keenly craves oxygen. Urged on by this air-hunger, it makes premature respiratory movements. But since air cannot gain excess to its nostrils, the child draws into its lungs the bloody and mucous discharges of the maternal passages. These foreign bodies so plug up the bronchia that the child is very liable to die either at

once from asphyxia, or within a few days after birth, from lobular pneumonia,—viz., atelectasis pulmonum.

From these causes the fœtal mortality in head-last labors is large; so large as to be an opprobrium to the profession. From the statistics of fourteen of the most skillful of British obstetricians, Churchill shows that they lost very nearly one child in every three. In ordinary breech-cases Hodge rates the average of still-births at thirty-three per cent. According to MM. Capuron and Cazeaux, in the more difficult cases from sixty-six to seventy-five per cent. perish. Said the late George T. Elliot (*Obstetric Clinic*, p. 347), "I always regret to meet a pelvic presentation in my practice, for fear that the child may not be born alive." In more or less vivid language, the testimony of this very distinguished obstetrician is sustained by all the authors of our text-books. Since, now, these statistics represent the experience of the most skilled specialists, of eminent teachers, of men who, by a large private and hospital practice, reached an unrivalled dexterity in their branch of the profession, it stands to reason that in the practice of the profession at large the average number of head-last still-births must be very much higher. For this mortality fifty per cent. is, I think, a very low estimate. But, mind, in the above statistics no account whatever has been taken of post-partum deaths from enfeebled vitality or atelectasis pulmonum, so common in the infant after this kind of labor. This loss in itself is so large that it must not be overlooked. Since, therefore, pelvic presentations occur about once in every fifty cases of labor, it follows that in every thousand labors a practitioner attends he will, from this cause alone, meet with at least ten still-births and several deaths within a few days after birth.

In view of these facts, the objects of this paper will be to search out the best means for shortening the duration of this kind of labor, for preventing the death of the child, and, as a conjoint consequence, for giving the physician a greater confidence at the bedside of his patient. These ends can, in my opinion, be best attained by classifying pelvic presentations under the head of preternatural labors. For, since a name misleads, if we include them under natural labors, as is customary, we shall be less likely to render the often-needed help.

For shortening the first stage of head-last labors I have found nothing equal to the hydrate of chloral. Given every half hour in doses of from ten to fifteen grains it promptly relaxes the most rigid cervix. In head-first labors the early rupture of the membranes usually hastens on the process of dilatation; but in head-last labors this means should never be employed. For obvious reasons it is of vital importance to keep the membranes intact until the os is fully and wholly open. If after the completion of the first stage of labor there is much delay in the descent of the breech, no better directions can be observed than those given by Barnes. The chest, shoulders, arms, legs, and sometimes the head of the child, all act conjointly in forming the base of a wedge, whose apex is represented by the breech. The apex engages, but the base being more bulky than the brim or the lower segment of the womb, forbids further descent. By bringing down one leg, and preferably the one nearer to the pubic arch, this wedge is broken up, and the further progress of the labor placed under the control of the physician. He should, however, make no further traction on this leg unless it is loudly called for, and then only during a pain, lest the arms should become extended. From a pretty large experience, I can confidently recommend this operation in all cases attended with delay. Nor should it be for a moment postponed after the heart-beats of the child become feeble. When the breech has descended so low as to preclude a resort to this operation, then, of course, the canonical methods of traction on the groins may be employed. But I really cannot understand why the gentle use of the forceps on the pelvis of the child is deemed more hurtful than that of the blunt hook in its groin. The pain that delivers the breech should be supplemented by traction or by supra-pubic propulsion, so that the arms and shoulders may also, if possible, be expelled at the same time. A loop of the cord must then be drawn down, so that its spirally-coiled vessels may not be constringed by being straightened out.

The breech being born, the uterine and abdominal muscles are in a great measure shorn of their expulsive power, and that at a time when most needed. The life of the child being now imperilled, its rescue is the next important consideration. From the mode of its death,—viz., from asphyxia,—it is plain that a prompt delivery is the only life-saving factor. Delay here means death. One of five minutes time may be one minute too much. Hence there must be no waiting for the manifestation of such danger signals as feeble pulsations in cord, or convulsive jerks of the limbs; no loitering for a pain to begin, for the arms to come down, or for the head to become moulded. The proverb *quieta non movera* has here no application whatever. The physician should urge the woman to bear down; but if these efforts prove unavailing, he must hasten to bring down the arms, and at once proceed to the forcible extraction of the child. I say this advisedly, for, although our text-books teach otherwise, I am sure that in nine-tenths of breech-labors it is inaction and not traction that kills the child. Fettered by sentimental conservatism, or by an allegiance to traditional technics, the physician folds his arms, when, had he as many hands as a Hindoo deity, they should all be nimbly at work. Never shall I cease to regret my first breech-case of labor, in which, fearful of breaking the cannons of obstetrics and the child's neck as well, I let the only child its mother ever bore die before my eyes. So needful to the welfare of the child do I deem its speedy delivery to be, that were an arm so impacted as not to be safely released without a probably fatal delay, I should not hesitate to break it, or, at least, to run the risk of breaking it. Nor do I stand alone in advocating this heroic treatment. It is upheld by such excellent authorities as Braun and Schroder.

In such emergencies, however, as M'Clintock and Bouchut have pointed out, and as I can bear witness, it is usually the clavicle that snaps and not the humerus. In those rarer cases in which the humerus is broken, the fracture is often partial,—viz., of the green-stick kind. By the aid of thin pasteboard splints and of straps of adhesive plaster, such injuries heal so readily and with so little deformity that they should weigh as trifles when life is at stake. In cases of pelves known to be ample, I can conceive of its being perfectly justifiable to follow Giffard's and Froriep's plan of dragging the head through with the impacted arm extended above, rather than that of losing golden minutes in liberating it.

Supposing, then, that the trunk and arms are born, and the head, gripped by the brim, alone remains for extraction, is the forceps to be resorted to? I answer, "No;" for, although this instrument is handy enough when the head is at or near the outlet, in high operations its application is attended with so many difficulties that too much precious time is lost. The problem being to get the child's head out as soon as possible, the only factors for its solution are limited to supra-pubic pressure upon the head, and to traction on the body. But the former is not by itself trustworthy; while, as to the latter, the great majority of physicians labor under the idea that the neck of an infant cannot bear much traction. "Would you be willing," they triumphantly ask, "to lift up by its head an infant just dressed and lying in the nurse's lap?" "Would you," it may be retorted, "be willing to make as much traction upon the lower jaw of a newborn child as you have just made in flexing its head? or would you compress its head with the forceps as viciously as you did a few minutes ago?" For obvious reasons, I object very decidedly to the nursery game of lifting a child by its ears to make it "see London." But, were one of my children drowning, I should not hesitate to grapple for its naked body with a boat hook, or to pull it out of the water by the hair, by the ear, by the nose, or by any prehensible portion of its body, regardless of any local injury it might sustain. Nay, were its limbs like those of canny James Lambert (Charles Reade's aquatic hero), weighted down by the death grips of some twenty other drowning persons, I should run the risk of breaking its neck in my frantic efforts to raise its chin above water-level. Now, a child presenting by the breech is in precisely this plight. It is under water, weighted down by the grip of the bony canal; it is drowning; and to any one drowning help must be sped,—help at all hazards.

The ancient Romans recognized this danger, and, as I believe, applied the only remedy for it. According to Pliny (*Historia Naturalis*, lib. vii. cap. viii.), they called all persons born in this manner, Agrippas. This name still puzzles etymologists; Aulus Gellius and Pliny himself derive it from *ægre partus*,—viz., *born with difficulty*,—but this is stoutly contested by others. With diffidence, I would suggest it to be either a derivative from *arripio*,—to snatch away; to take by force,—or a compound from the Greek word Γρύψ—a griffin or fabled winged monster with four sets of talons,—from which our own word *grip* is derived. Thus interpreted the name Agrippa is descriptive of the mode of birth, and means one snatched away, or taken away by force. But such a mode of delivery necessarily hinges on the tensile strength of an infant's neck, and this will, therefore, next engage our attention.

The adult neck is strong enough to bear the immense strain of the gallows-drop without sustaining a luxation of the atlas on the axis. Criminals executed in this manner usually die from suffocation. What holds good with adults holds good relatively with children; and it is wonderful what a strain their necks will safely bear. From experiments made adversely to version in narrow pelves, and, therefore, the less likely to overrate the tensile strength of the fœtal neck, Matthews Duncan concludes (*British Medical Journal*, December 19, 1874, p. 763) that the neck of a dead child can, at term, sustain the average weight of one hundred and five pounds before the spinal column gives away, and one of one hundred and twenty pounds before the body parts from the head. These averages are, I think, under-estimated rather than over-estimated, for out of the four fœtuses experimented upon, two of them weighed under six pounds; and the other two, weighing, respectively, seven pounds and seven ounces and eight pounds and fifteen ounces, sustained each weights of one hundred and forty-one pounds and one hundred and thirty-six pounds before decapitation took place.

In a difficult breech-case to which Julin was called in long after the child was dead, he delivered the woman, after employing for twenty minutes a steady traction-force of one hundred and two pounds, made by a noose thrown around the neck of the child (Traité complet d'Accouchements, p. 1062). In conducting a series of experiments to determine the value of version in narrow pelves, he delivered with unbroken necks (p. 1050) the heads of three dead infants after putting on their feet a steady force respectively, of one hundred and twenty-five, one hundred and forty-five, and one hundred and forty-eight pounds. But it must not be forgotten that these experiments were made upon dead children, and that the tensile strength of a living child's neck is presumptively greater. Again Joulin also proved with his dynamometer that, without any purchase for the feet, and by pulling merely with the muscles of the arms, a robust man can exert on the forceps a maximum weight of one hundred and thirteen pounds. From analogous experiments made by Delore, a force of only one hundred pounds was reached (p. 1065).

Now, with the woman lying on her back and myself standing in a stooping posture before her, I have repeatedly delivered living and lusty children by putting on their necks all of my weight possible in that position. By grasping a cane in an analogous manner, and forcing it down on Fairbanks's scales, I find that one can for thirty seconds exert a steady

downward pressure of about ten pounds more than half the weight of one's body. That is to say, I, who weigh one hundred and ninety pounds, can, for a very short time, exert a steady power of one hundred and five pounds. By throwing my weight suddenly upon the cane in quick jerks, I find that I can tip the beam at one hundred and thirty pounds; and this great weight I certainly have on several occasions thrown on infants' necks. Yet I can confidently say that, notwithstanding this severe strain upon the spinal column, I have broken it but once, and have never failed to save the child whenever its birth was completed soon enough. Should much disproportion exist between the size of the head and the capacity of the brim, it is emphatically a case of "neck or nothing;" and the operator must not shrink from promptly using very great force,—a force, indeed, only just short of detruncation. But I do not believe it possible for a physician even to break the neck of a mature child, much less to behead it, if he applies a steady traction-force in the manner above described,—viz., by pushing the neck and body of the child backward and downward, just as he makes downward pressure on the lock of the forceps. Not even when the infant is immature should the efforts of the physician be hampered by the fear of sudden decollation. For the spinal column always yields before the skin and muscles part, and the consequent jerk and the immediate elongation of the neck will give timely warning when to useless force, or, the child being now dead, to end the labor by craniotomy or cephalotripsy. Far better is it, in these emergencies, to kill in attempting to save than to kill by cowardly inaction.

I once saw the strength of the child's neck put to a crucial test, and the result amazed me. I frankly confess that had I not been an eye-witness I should have been a doubter. It was a case of a primipara with flat pelvis and a large but putrid fœtus. After craniotomy had been performed, a further obstruction to the delivery lay in the bloated chest and belly. Before this second complication was recognized, each one of the four physicians present, including myself, took his turn at the forceps. From a natural rivalry, the traction thus necessarily made upon the neck of the fœtus by three of us in succession was no child's play. But that made by the fourth gentleman, a distinguished member of this Society, exhibited so much power and originality that I shall here describe it. He turned the woman over on her side, brought her lips to the edge of the bed, and applied Hodge's forceps. He next carefully tucked a sheet around the lock of the instrument, removed his shoes, sat in a chair, and placed one foot across the perineum, the other across the vulva. He then grasped the handles, straightened out his body, and pulled with all his might and main, making every muscle in his body quiver with the effort. Yet, in spite of the enormous strain brought to bear upon the neck of the child, it was simply lengthened out, but not broken. The cranial stump was brought down to the outlet, but it literally sprang back at every intermission of the traction. This behavior of the head, or rather of what was left of it, was in fact the first clue that led to the discovery of the obstructive size of the child's body.

Although these facts show the wonderful tensile strength of the fœtal neck, yet, in order to extract the head with a minimum of traction-force, it is of great importance to exert the power to the best mechanical advantage, and to grade it to the resistance. This brings me to the mode of making traction; but in order to understand the subject fully it will be first necessary to study the configuration of the fœtal head, and the mechanism of its extraction. In so far as breech-labors are concerned, the fœtal head is made up of the frustums of two cones meeting in one common base. One cone is that portion of the head behind the biparietal circumference; the other consists of that portion in front of the same plane. I shall distinguish them by the names of the "fore cone" and the "hind cone." Looking from below upwards,—viz., from the base to the vault,—the head is also wedge-shaped. This I shall call the "wedge." Now, it has been found over and over again, except in those rare cases of uniformly contracted pelvis, that, when an infant is pulled through the brim by the feet, the shorter diameter of the fore cone—viz., the bitemporal diameter—tend to pass directly between the sacral promontory and the pubic symphysis, and the hind cone, together with the large biparietal diameter,—viz., the base common to both cones,—to pass to one or the other side of the two osseous points. The shorter the conjugate diameter the more inflexible is this law. The head thus makes its first movement of descent in an unflexed condition, but there is usually plenty of room in the bisiliac diameter for the occipito-frontal diameter to pass. Again, the distance measured from the chin to the nipped points of the head—viz., the ends of the bitemporal diameter—being less than the distance from the occipital protuberance to the same points, the chin can hardly ever catch over the iliac edges of the brim. Theoretically, the extension of the head by the arrest of the chin over any point of the brim is a possible accident, but practically its occurrence is so rare that it may be left out of consideration. Mauriceau saw but one case; in many thousand labors Madame Lachapelle did not meet with one; nor did Velpeau, who, however, notes one occurring in the practice of Leroux, and another in that of Eckardt. Joulin states (p. 559) that he not only never met with this complication, but that he in vain repeatedly tried to bring it about by forcing the back of the child into the hollow of the sacrum. The cause of this almost invariable adjustment of the occipito-frontal diameter to the transverse diameter of the pelvis is the round and hard surface of the occiput, which glides off to one side of the sloping promontory. The head, therefore, passes the brim in the transverse position and in an unflexed condition. But when it is brought into relation with new pelvic diameters, the greater friction of the broader and harder surface of the hind cone brings about the movements of flexion and rotation.

Granting these premises, it follows that the occipital protuberance is far more likely than the chin to hook over the edge of the brim, and that flexion is

an undesirable movement while the head is passing through the conjugate. The rule, therefore, to make flexion at this stage of labor, by passing two fingers into the mouth or on each side of the nose, is not only a piece of meddlesome midwifery, but it entails the loss of much traction-power, and is a sheer waste of very precious time.

According as the pelvis is of average size or is narrowed in its conjugate diameter, I adopt two modes of extracting the wedge-shaped head; but the one that I shall first describe is the one that I invariably first employ. The woman may retain the lateral position, but, for reasons to be hereafter given, I much prefer her to lie on her back, with her hips brought to the edge of the bed. In a brim narrowed in its conjugate, the promontory is usually sharp and projecting. The sacral side of the after-coming head tends, therefore, to be bent in by this osseous point and to become fixed by it. Hence the extrication of the head as a whole can take place only when its pubic side revolves around the promontory and glides down over the smooth under surface of the pubic symphysis. Bearing this fact in mind, it is important that the sacral side of the head should become fixed at a point as high up as possible,—viz., as near to its vault as possible. To gain this end, the physician, after grasping the nape of the neck with one hand, and the ankles with the other, should make his first movement of traction in the axis of the outlet, for then the pubic side of the head will be tilted away from the inlet, while the sacral side will proportionately descend over the edge of the promontory, and affront the brim. This canting of the head can be very materially aided by an intelligent assistant, who will make very firm backward and downward pressure with both hands, through the now flaccid abdominal wall, upon the vault of the head. By this manœuvre the promontory is made to indent the sacral side of the head at a point still higher up, and nearer to the vault, hence the arm of the lever, measured by a line drawn from the base of the skull to this fixed point, will be correspondingly lengthened,—a mechanical advantage not to be overlooked. If now, *without for a moment relaxing, but rather increasing, the original traction-force*, its direction be reversed, and the body of the child be swept backwards upon the coccyx, the neck being also forced downward and backward into the hollow of the sacrum, the sacral side of the child's head becomes deeply bent in, and the pubic side is made to revolve around the promontory and descend with the least expenditure of traction-force. In other words, the head is warped around the promontory. Should the neck be so short, or the pelvis so deep, that the physician cannot well grasp the nape, he may loop a thin muslin sling over it, and draw on the ends, which should meet in front of the chest.

Whenever this mode of traction fails to release the head from the grip of the brim, or the difficulty lies rather in the size of the head than in the narrowness of the pelvis, I have, on several occasions, succeeded by a pump-handle movement. Made with a steady and an unremitting traction, it will cause each side of the wedge-shaped head to descend alternately. The range of oscillation should extend from the axis of the outlet anteriorly, to very firm pressure on the coccyx posteriorly. With a sharply-defined promontory this up-and-down movement does not ordinarily succeed, unless the parietal bone has been broken in or greatly depressed as a whole, and not simply indented. Otherwise, the sacral side of the head is held fast, and the pubic side will then librate around the indented, and therefore fixed, point, merely rising and falling, without any onward progress whatever. But in the breech-cases ordinarily met with, in which the sacro-vertebral angle is usually round and knobby, or in those of large heads and average pelves, this pump-handle movement will be found a very precious expedient.

To either method supra-pubic propulsion by the hands of an assistant is a very important adjuvant. It can with safety be made to any extent, and will greatly lessen the amount of traction-force necessary for delivery. As soon as the head has passed the brim, which it does usually with a distinct jerk flexion and rotation spontaneously take place, and the line of traction must then be changed to that of the outlet. When finally the head is about to clear the bony canal, the body of the child should be raised up in front of the pubes, according to Hodge's plan, and traction made directly upward in a line at a right angle to the mother's body. This final method of traction augments the flexion of the head, and obviates the necessity for putting two fingers into the child's mouth. When the face presses on the soft parts, two fingers passed up into the rectum will still further increase the flexion of the head, and will serve to protect the perineum from injury.

To sum up, then,—the mechanism of a forced delivery consists in propulsion and three movements of unremitting traction. That failing in propulsion and a pump-handle movement of traction. Of the three movements of traction, the first is made in the axis of the outlet, the second in the axis of the inlet, and the third in the curve of the obstetric canal.

I have been somewhat minute in these directions, because physicians, by continuing the backward traction long after the head has slipped past the brim, sometimes fail to deliver, and because by this faulty traction the chin hooks over the perineum and badly tears it. One word with regard to the perineum: In head-first labors due time can generally be given for its complete dilatation; but in head-last labors even seconds are too precious to be thus wasted. If, therefore, air cannot be communicated to the mouth or to the nostrils of the child through the gutter made by the physician's fingers, he must disregard the consequences to the mother and forcibly deliver by traction, or, this failing, by the forceps. Should the perineum be torn, as it usually will be in a fat primipara, a perfect union of the wound may be confidently looked for from the immediate introduction of wire sutures.

In both the previously-given modes of extraction I prefer the woman to be on her back, with her hips brought slightly over the edge of the bedstead, and each knee supported by an assistant. My reasons for this position in preference to the lateral one are:

that the propulsive pressure is then more efficiently given either by the hands of a third assistant, or by the free hands of the two assistants; that since the power thus applied resolves itself into a question of weight and not of strength, very few physicians, while bending forward in front of the woman thus placed, can exert a steady force of one hundred pounds upon the neck of the child; and, finally, that the upper hand of the physician can then force the neck into the hollow of the sacrum and thus make the line of traction somewhat behind the axis of the superior strait.

In conclusion, let me say that, since adjusting all sentimental considerations for the child's neck to a sliding scale of pounds avoirdupois, and since adopting the foregoing methods of delivery, I approach a case of head-last labor with an assurance of success such as I never had before, and such as I wish to impart to those who lose heart the moment the examining finger discovers that the head is not the presenting part.—*Philadelphia Medical Times.*

DR CHARPENTIER ON PLACENTA PRÆVIA.

By A. V. Macan, M.B., M. Ch., Dubl.;
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In the *Archives de Tocologie* for 1874 will be found a series of papers on puerperal hæmorrhages by Dr. Charpentier. Of these the most interesting are those on placenta prævia, both on account of the importance of this complication, and also, because the treatment adopted by the author differs considerably from that recommended by some of the most recent English authorities on the subject.

We regret that want of space prevents us giving more than a short abstract of some of the more important points dwelt on by Dr. Charpentier.

It was not till the year 1685 that the fact of the placenta being inserted over the os was discovered by Portal. Before his time the presentation of the placenta at the os at the commencement of labour was thought to be due to its becoming detached from its insertion at the fundus, and subsequently sliding down so as to cover the os. From the time of Portal up to the present, many explanations have been given to account for its abnormal insertion. That adopted by Schröder, one of the latest writers on obstetrics, is, that it is caused by enlargement of the cavity of the uterus, accompanied by an unnaturally smooth condition of its mucous membrane. This would, he thinks, account for its more frequent occurrence in multiparæ, in whom the cavity of the uterus is enlarged and the rugæ of the mucous membrane often obliterated by previous leucorrhœa.

Authors are as yet not quite agreed as to the cause of the hæmorrhage which so frequently appears at the seventh month, and recurs at intervals up to the time of labour. The old explanation of this was, that it was caused by the taking up of the cervix. M. Holz has, however, shown that the cervix remains intact up to within a few weeks, in some cases even till within a few days, of full time. This theory also fails to account for its occurring, as it often does, when the os is quite closed. The most recent explanation is, that during the latter months of pregnancy the lower segment of the uterus, in addition to its increased growth, is subjected to a mechanical distension with which the growth of the placenta cannot keep pace. Hence you have partial separation and consequent hæmorrhage. Once labour sets in, the hæmorrhage is of course caused by the dilatation of the os.

How, then, can we account for the fact that in some rare cases there is no hæmorrhage at the time of labour? Simpson explained it by saying that the hæmorrhage came from the placenta, and that if the placenta was wholly detached the hæmorrhage must cease. The now well-known explanation of Dr. Robert Barnes is, that when all that portion of the placenta which is attached to the "cervical zone" has become detached, the hæmorrhage will at once cease, provided there is uterine action. For when this has taken place there is no necessity for any more of the placenta to become detached to allow the child to pass, and there is therefore no fresh hæmorrhage. While at the same time the vessels already laid open by the detachment of the placenta are closed by the expansion or shrinking of the os. We regret that in noticing this theory the author has thought fit to accuse Dr. Barnes of having borrowed it from M. Legroux. The following facts may tend to put the matter in its true light. Dr. Barnes first published this theory in the *Lancet* as long ago as the year 1847, it was the subject of his Lettsomian Lectures in the year 1857, and was well known in England before the publication of his book on "Obstetric Operations," in 1871. M. Legroux first published his views in the *Archives de Médecine* for 1865.

If attention be paid to the following points, the diagnosis can be made without much difficulty. First, the time at which the hæmorrhage first makes its appearance, viz., from the seventh to the eighth month, in some rare cases as early as the sixth month; the fact that it comes on suddenly, without any known cause, and stops as suddenly; and that it reappears at uncertain intervals, but in increasing quantities, up to the time of labour. Second, the absence of ballottement, the thick mass of the placenta being interposed between the finger and the fœtal presentation. Gendrin has even noticed a pulsation through the cervix not synchronous with the maternal pulse. Dr. Charpentier thinks that M. Depaul has shown conclusively that we cannot place the least dependence on auscultation as an aid to diagnosis.

Naeglé was of opinion that the less complete the presentation of the placenta, the more advanced the pregnancy would be before the hæmorrhage appeared, and that in cases where only a small portion of the placenta presents with its margin at the os, there may be no sign of hæmorrhage till labour sets in. The hæmorrhage in cases of placenta prævia is always external; it takes place during the uterine diastole, but is expelled during the systole, and if the latter were continuous it could hardly take place at all.

The fœtal mortality increases according as the

placental presentation is more or less complete, the average mortality being about 3 in 5. The maternal mortality given by the older obstetricians was as high as 1 in 3. Dr. Charpentier thinks that an experienced practitioner can almost always save the life of his patient.

The question of treatment is considered at great length. But in mentioning the different plans of treatment that have been proposed, the author confounds in a curious manner that recommended in some cases by Sir J. Y. Simpson, with that proposed by Dr. Robert Barnes. Thus at p. 420 he says these methods are "artificial delivery, ergot, the plug, rupture of the membranes, and the plan recommended by Simpson, Barnes and the English, of detaching the placenta and extracting it before the birth of the child."

The first, or artificial delivery, is a most dangerous method only suited to most urgent cases. The rupture of the membranes is very good treatment, provided the os is partially dilated. It is hard to do when the presentation is complete. The use of ergot is a powerful auxiliary, but it increases greatly the danger to the child, and is contra-indicated in contraction of the pelvis, organic disease of the uterus, and malpresentation.

The author looks upon the plug as the treatment *par excellence*. It requires to be applied skilfully to be of any great use. Charpie or tow are the best materials with which to plug, and if properly applied, the author considers such a plug superior to any description of India rubber bag which can be introduced into the uterus and inflated. The great point to attend to when plugging is to introduce enough of the charpie or tow, as much as a pound and a half of the former material being sometimes necessary. The bladder and rectum should both be emptied before we proceed to plug. Some practitioners dip the first pledget in a solution of perchloride of iron. This is not necessary.

The charpie should be rolled into small balls, the first 20 or 30 of which should have a piece of thread attached. Before being introduced they should be well covered with cerate. This renders a speculum unnecessary.

The author lays great stress on packing tightly the anterior and posterior cul de sac, but especially the latter. The success of the operation depends to a great extent on this being well done. The vagina itself should be filled with the small pledges, until they appear externally. Then you apply a handful or more of dry charpie, and over that three or four compresses, the whole being fixed by a T bandage. If this plug be well applied there can be no hæmorrhage. If the charpie at the vulva become moist it is a proof that the plug is badly applied, and it should be removed at once and reapplied. To be of much service the plug should be left in from 12 to 24 hours.

The author then examines the following objections that have been brought against the plug:

1st. That it only changes external hæmorrhage into internal.

2nd. That it tends to bring on premature labour.

3rd. That its application as well as its presence in the vagina is very painful, and prevents the rectum and bladder being emptied.

As to the first: if the membranes are still unruptured and the plug properly applied, internal hæmorrhage is impossible. If the membranes are ruptured, the chance of internal hæmorrhage is increased, and we must apply a bandage to the abdomen, and be ready, should the uterus increase in size, at once to remove the plug, and finish the labour by other means. The second is of no great weight, for the hæmorrhage generally takes place after the child is viable, and in any case we have no choice. The third can be obviated by passing a catheter, and seeing that the rectum is empty, before applying the plug.

Dr. Charpentier urges many objections against the plan proposed by M. Pajot, and practised extensively of late by M. Bailly, viz., of leaving the plug *in situ* till it is expelled by the uterine effort, pressing it back again into the vagina with the hand, during the intervals between the pains. The most serious of these is, the great fœtal mortality, which even the defenders of this plan acknowledge it entails. Again, it is not applicable in cases of malpresentation, which are common, and it requires powerful uterine action, which is rare, in cases of placenta prævia.

If, on removing the plug at the end of twenty-four hours, it is found that there is no uterine action and that the hæmorrhage has ceased, we need not reintroduce it. If there is uterine action, and the os is still very small, we should again introduce it, but not allow it to remain so long as before, at the same time giving small doses of ergot. At the end of from eight to twelve hours, we should again remove it, and proceed to puncture the membranes, provided the hæmorrhage is but slight; if, on the contrary, it is still considerable, we must again introduce the plug, and wait till the os is sufficiently dilated to allow of operative interference.

This may be either manual or instrumental, the choice being determined by the usual conditions, such as presentation, prolapse of the cord, &c., &c. Dr. Charpentier does not look with much favour on plugging by means of India rubber dilators.

The author then briefly reviews the method first proposed by Radford, and usually known as Simpson's method, evidently under the impression that the latter advised its being carried out in every case of placenta prævia. He, of course, condemns it. He then notices the method proposed by Cohen for converting a complete presentation into a partial one, by detaching the smaller segment of the placenta from its uterine attachment, rupturing the membranes freely along the edge of the detached portion, and allowing it to hang down into the vagina, and thus no longer cause any obstruction to the delivery.—*Irish Hospital Gazette.*

ON EPIDEMIC SCARLATINA.

By William Moore, M.D., The "King's" Professor Practice of Medicine; Professor of Clinical Medicine and Physician to Sir P. Dun's Hospital and to the Institution for Diseases of Children, etc.

CASES OF SCARLATINA ANGINOSA—MALIGNA—"GLOSSITIS" COMPLICATING SCARLATINA—TREATMENT.

Gentlemen,—It occurred to me that there is a subject of immediate and great practical importance which I should not pass over in this present course of lectures. I refer to the presence amongst us of epidemic scarlatina. We have had scarlatina epidemic amongst us I may say for the last year. It was particularly fatal in the months of September, October, November, and December, and though it abated somewhat in the months of January and February, my own experience would tell me that in all probability we shall have another burst, or a revival of this exanthem in the month of March, because of all the months in the year I believe March is the most obnoxious, if I may use the expression, to scarlatina. I do not intend to take up your time with the hygiene or the etiology of this disease, but I propose bringing before you some typical cases of the present epidemic. I leave what may be called the simple cases of scarlatina, many of which are so benign that without treatment, and with common caution on the part of these patients with regard to avoiding cold, they will get well without complications of any kind. I exclude that type altogether, and take you to the more severe forms of scarlatina, which are called the *Anginose* and *malignant*.

I will first take a typical case of the "Anginose" form of the disease.

Margaret B——, aged 12 years, was seized on the 18th November last with shivering, headache, pains in the back, suffusion of the eyes and soar throat, and on the 19th was admitted into Sir Patrick Dun's Hospital. On admission her face, neck, and arms were covered with an eruption which she said came out on the previous day, and which was of a deep purple colour. Her throat was red and swollen, and her tongue thickly furred. Her pulse on admission was 160, and her temp. 105°·2 Fahr. Now these are the most important points for you to attend to, the quickness of the pulse and the height of the temperature. On visiting her the following day I found that she had been very delirious during the night: her respiration was hurried, and she complained of difficulty in swallowing; the eyes were very suffused, and there was sordes on the teeth. I recommended hot water inhalations to be used continuously, and she was ordered five grains of chlorate of potash three times a day. On the second day of her admission her pulse was 130 in the morning, with a temp. of 104°.7. On the following day, the third, I found that she had been very delirious during the night, and that she had vomited. The eruption was now all over her body, of a livid colour; her tongue was red and dry, pupils dilated, pulse 150, temp. 105°·7. The inhalations and the chlorate of potash were continued, and she was getting as much beef tea and milk as we could induce her to take. On the following day she was so restless and violently delirious that she had to be held in bed. The eruption was still of a livid hue; her pulse was 140, and her temp. 103°. On account of the sleeplessness she was ordered eight grains of bromide of potassium to be taken at bedtime. On the following day I found that she had been very delirious during the night, and constantly trying to get out of bed. She would not protrude her tongue. The eruption was disappearing from the upper extremities, and was losing its livid colour somewhat. Her pulse was 120, and temp. 102°·6. The bromide of potassium was repeated at bedtime. The following day I found that she had slept well, and that there had been less delirium during the night; the tongue was brown and dry, and the eruption fading, but the left parotid gland was very much swollen: her pulse was 140, and her temp. 104°·3.

The next day, the 25th November, she had slept well, and there was no delirium; the parotid and submaxillary glands were very much enlarged; her pulse was 140, and temp. 102°·8 in the morning, her evening temp. being 104°·6. On the 26th November the report was that she had slept well, that there was no delirium, and that all the symptoms were improved, but she complained of pains in her bones and pain over the submaxillary glands. Her neck felt brawny and was generally enlarged, and there was a sanious discharge from the nose. Her pulse was 136, and morning temperature 102°·3. On the 27th of November, the eighth day after admission, she had slept well but was again slightly delirious. In the morning her pulse was 150, and temp. 102°·8; and in the evening her temp. was 104°·1 She was now ordered one ounce of brandy, to be taken in milk during the twenty-four hours, with beef tea *ad libitum*. On the 28th I found that there had been some delirium—a quiet kind of passive delirium—during the night: her pulse was 128, and her evening temp. 105°·1. The brandy and general treatment were continued. On the 30th November I increased the brandy to two ounces, and on the 2nd December, in addition to the two ounces of brandy, ten drops of the syrup of iodide of iron three times day. Matter formed in the left submaxillary space, which was opened by Dr. Bennett on the 5th December. The same treatment was continued, and on the 11th December her temp. was normal, and did not again rise above 98°·8 during her stay in Hospital, which she left on the 19th December, having made a complete recovery.

Now this case is an example of Scarlatina "Anginosa." It is a type of a very severe form of scarlatina. Let us just look at the symptoms that occurred. In the first place, the temp. at the end of twenty-four hours was 105°. Now a temp. of 105° at the start of any fever is of very serious import: it is a very unfavourable omen. In this case we had a temp. of 105° and a pulse of 160 at the end of twenty-four hours. Now I maintain that there is no disease that we know of in which you could have within the same time such a range of pulse and temperature. Hence it is that in a great many obscure cases of scarlatina, where you have an ill-defined

eruption, and where doubt exists whether scarlatina is present or not, if you have such a sudden accession of temp. and pulse as I have shown you, even in the absence of eruption, I believe you would be generally right in pronouncing the case to be scarlatina; for I know of no disease that within the same time will run the pulse and the temp. up in this sudden way. You have no such analogous rise of pulse and temp. in continued fevers. The temp. and pulse does not run up to such an height in typhoid fever within twenty-four hours; on the contrary, we look on a case of typhoid fever, with a temp. of 105° Fahr. at the end of the first week, as very high and ominous of mischief, and I need not tell you that in typhus we do not expect a temp. of 105° before the fifth or sixth day, and even then it would portend an extremely bad case. In fact, a temp. of 105° at any time in typhus would mean a very heavy case. These two clinical facts, the sudden running up of the pulse and temp. taken together where a doubt might arise, during the prevalence of scarlatina, would, even in the absence of eruption, justify you in saying that it was a case of latent scarlatina.

In this case we had also at the end of twenty-four hours, sordes on the teeth. The remark which I made at the time about the sordes on the teeth, as some of you will no doubt remember, was:—"Gentlemen, this will be a very severe case of scarlatina." It would not have surprised me to have seen sordes about the third, or fourth, or fifth day; but with such a temp. and pulse, and sordes at the end of twenty-four hours, it was pronounced a most severe case, as it eventually turned out. Whenever you have such an early high temp. and so quick a pulse, and the objective sign of sordes, you will correlatively have another symptom, the value of which over and over again I have pointed out to you in connection with long and short fevers, viz., delirium. You cannot attach too much value to the symptom of delirium; and to understand its clinical value you must weigh well the different degrees of delirium. The delirium in this case was of a very active kind. She was a young girl, 12 years of age, extremely florid, and her delirium was so active that a nurse was told off to keep her in bed, and eventually we had to use mild restraint by tightening the sheets. There is one other kind of delirium in scarlatina, in which there is a low muttering from the start, of which I will give you a typical case. From the very first night after the accession of the fever this girl became delirious, and the delirium went on increasing till the fourth day.

Now if a patient in fever gets delirium, whether it is active delirium or of a more passive kind, either in typhus or enteric fever, within forty-eight hours, what would be your prognosis of such a case? The end of that case would probably be, that about the time the scarlatina would be "defervescing," the "typhus" would be comatose. That is something like the clinical value which attaches to delirium, occurring early in continued fevers. If you found a patient in typhus fever delirious on the second day, I fear in spite of all your stimulation and support, the case would prove fatal. Nor do we meet with such very early active or violent delirium in typhoid fever, but if it did occur, its prognosis would be equally unfavourable. But here was a girl with the most active delirium, and yet we did not shave the head, or put ice to her forehead, or use either antiphlogistic or stimulant remedies. We let the delirium alone; and why? Because we were aware that this girl's fever was a short fever; we knew that the high temperature and small pulse, and all the co-relations of fever in this disease, generally abate about the fourth or fifth day. If this girl had to go through a continued fever of twelve or fourteen days, with such a high temperature, and signs of such combustion at the start, we would have treated it very differently. But we took the delirium for what it was worth, and gave no stimulant, but plenty of beef tea and milk diet. The case went on as you saw, and the delirium left her for a time; but then there was a secondary kind of delirium about the eighth day. Now what is the meaning of the returning delirium? The eruption had disappeared, and though her tonsils were very much enlarged, and there was general cervical glandular enlargement, the temperature was coming down, and she seemed on the high road to convalescence, when she got delirium again on the eighth day. This delirium was associated with swelling of the parotid and submaxillary glands. This was a different kind of delirium from the first. It was what we call a passive form of delirium. If you ask me what I consider its clinical character, I answer that I regard it as a pyæmic symptom which you will see coming on about the eighth, ninth, or tenth day in scarlatina. The moment this delirium ensued we at once grave the patient stimulants, commencing with one ounce of brandy, and increasing it to two ounces in the twenty-four hours, with as much beef tea, milk, and nutriment as we could get her to swallow; and when I found this glandular enlargement still extending, ten drop doses of syrup of the iodide of iron were added every third hour. By this treatment the girl, so to speak, battled through the disease, till matter formed, and was given vent to in the submaxillary space, and she recovered.

I have dwelt on the treatment of this case, which was one of very considerable severity, and I may tell you that these buboes in the neck in scarlatina are frequently attended with fatal results; but take care lest the fatality of these cases has been added to by what may be called lowering and antiphlogistic remedies. Be that as it may, my advice to you would be, whenever you see a case of scarlatina with submaxillary and cervical glandular enlargement, coming in with secondary fever about the eighth, ninth, or tenth day, let your treatment be stimulant and generous.

Now this case is a type of what may be called the scarlatina "anginosa." It is a severe form of the the disease, but there is a much more severe and fatal one. There is a type called scarlatina "maligna," which is ushered in in this wise. It seems as if the poison, so to speak, seized upon the patient, that he or she was so completely overwhelmed by it, that death ensues frequently within thirty-six or forty eight hours. I will give you a type of this form o

scarlatina. A girl, called Kate D——, was seized on the evening of the 3rd December last, with shivering, headache, and sore throat. She was brought to Sir Patrick Dun's Hospital on the morning of the 5th. She was the fourth member of her family that caught scarlatina, the other three having died at home. After admission, when conscious, she complained of nothing but headache and great thirst. There was delirium of a low type. She had no evidence of any tonsilitic enlargement of any kind. She was in a most restless, agitated state, with subsultus twitchings about the angles of the mouth; her face was bluish, and faintly mottled. She kept picking at the bed clothes, and was sleepless. She could scarcely be got to give an answer to a question, or to protrude her tongue, which was dry and black; her teeth and lips were covered with sordes, and she was suffering from diarrhœa, of which she gave no warning. Now, it would be impossible to meet with more grave symptoms than these. On admission she got wine liberally; her pulse was then 140, and temp. 101°·9. The following morning, 6th December, I found that she had dozed at intervals during the night, but was very delirious; and all the other symptoms more aggravated. Her delirium was of a low muttering character. The erruption was out on the lower extremities, but of a very livid colour. Her pulse was 150 this morning, and her temp. had fallen to 96°·6. She was ordered fifteen minim doses of tincture of perchloride of iron, to be taken every third hour; a tablespoonful of brandy every second hour, day and night, with as much milk, and rice milk as she could be induced to take. On the following morning, the 7th December, I found she had been still very restless and delirious during the night, and that she had not slept. Her pulse was 130, and her temp. 100°·2. On account of the sleeplessness she was ordered twenty grains of chloral at bedtime; the iron and brandy to be continued as before. On the 8th December, she was still delirious, and constantly trying to get out of bed. Her pulse was 100, and temp. 98°·3. The brandy and the iron mixture were continued in the same doses, and she was ordered twenty grains of bromide of potassium, instead of the chloral hydrate at bedtime. On the 9th, she had slept more quietly, with almost no delirium, but had vomited freely. Her pulse was now down to 90 and temp. to 97°, and for the first time she had given warning, when she wanted the nurse. The brandy and the iron mixture were continued. On the 10th December she had slept well, with no delirium, and was very much better. The iron mixture was continued, but the brandy was reduced to half ounce doses every fourth hour. From that time this patient did well, and she left the Hospital with a normal pulse and temperature on the 15th December.

Now the symptoms in this case were typical of what we call the scarlatina "*maligna*." You see that the delirium differed from the delirium in the previous case in being of a low, asthenic type; and hence from the very start, I may say, I at once put this girl on the most stimulating plan of treatment I could devise, and a treatment which you will see the value of, the more you employ it in these low, typhoid, exanthematous cases, viz., the old fashioned muriate tincture of iron, which she got in fifteen drop doses every third hour, day and night, with half an ounce of brandy every second hour, day and night.

This girl had a symptom which was not present in the other case. In addition to her delirium, she had abortive convulsions. I do not mean to say that she threw herself about, or bit her tongue, but she had suppressed convulsions, evidenced by twitchings about the angles of the mouth and muscles of the face, and subsultus. Whenever you see symptoms of convulsions ushering in scarlatina, "you may look out" for the worst. It is a most grave symptom when ushering in scarlatina, especially when superadded to the other symptoms I have mentioned; but you may have convulsions at another period of your scarlatina, and though the ushering in of this fever with convulsions is of serious moment, *cæteris paribus*, in my mind it is not so serious as the accession of convulsions in the secondary stages of scarlatina, when it is generally associated with anasarca and uræmia. Again, in this case, we had vomitting, sleeplessness, and diarrhœa. In fact, all the gravest symptoms occurring early.

I have cited those two cases as typical of the more severe form of the disease. The latter type of the disease is one that almost invariably proves fatal. In connection with the treatment which you see I have adopted in those cases, I may say that wherever I see grave symptoms, I adopt the stimulant and chalybeate treatment I have mentioned; and in proof of its therapeutical value, I will adduce some other case. In consultation with Dr. Edward White of this city, about six weeks ago, I saw three children, members of the same family, in scarlatina. The first was a boy between three and four years of age; he had been about seven or eight days in scarlatina when I saw him; he was delirious, and screaming, and had a sanious discharge from his nose, an offensive discharge from both ears, and great submaxillary and cervical glandular enlargement. The treatment adopted was five minims of the muriate tincture of iron every third hour, with an ounce of brandy in a pint of milk, and beef tea as much as he could be got to swallaw.

This case, which was a type of the scarlatinal bubo, the entire neck giving a brawny sensation to the hand—recovered. The next was a girl about five years of age, and she got the typical sore throat of scarlatina, which I may tell you is a bluish condition of the fauces and arches of the palate, and an œdematous condition of the uvula, with a kind of creamy white epithelial exudation, in patches over the tonsils and fauces. It is not of a diphtheritic character, nor of a yellowish sloughy colour, but is a whitish, creamy, nontenacious exudation. This girl had the eruption well out with this condition of throat. We were not uneasy about her till about the eighth day, when her temperature got up, and she got scarlatinal rheumatism. She suffered from

severe pains in her shoulder, elbows, and wrist joints. We at once put her on iron and brandy, and the case did well. The next member of the family was a girl about ten years of age. She had a sanious discharge from the nose and ears, and buboes in the neck. She was treated on identically the same plan, viz., with eight minim doses of muriate tincture of iron every third hour, a teaspoonful of brandy and milk every second hour, and though the case was very protracted, eventually matter pointed in the neck, and she recovered.

I mention these cases with their salient symptoms, especially the buboes in the neck, as typical of the value of the stimulant and iron treatment in cases with pyæmic symptoms—a mode of treatment which I fear is not sufficiently often steadily carried out.

I will now adduce to you another case, in which there was a complication, viz., *glossitis*, which I saw for the first time in scarlatina. A gentleman in this city, aged about 18 years, sent for me, complaining of rigors, chilliness, and pains in his bones. I suspected scarlatina, and on examination, I found faint eruption on his lower extremities; desquamation ensued in due course. On the eighth day, slight enlargement of the submaxillary glands took place, the tongue being morbidly red. On the morning of the ninth day, when I entered his room, I was struck with a peculiar smell, and on looking at my patient, found him with his tongue protruding from his mouth; he could not close his mouth, or keep in his tongue. His speech was quiet unintelligible from the size of his tongue, and he could not swallow, and within twenty-four hours this acute glossitis had set up, and he had been delirious during the night. I at once made a free incision along the dorsum of the tongue, and promoted the bleeding with hot-water gargles, afterwards employing gargles of chlorate of potash, and put him on fifteen minim doses of the muriate tincture of iron every third hour, and a tablespoonful of brandy and milk every second hour, night and day. The scarification was attended with complete success. I saw him in the afternoon of of the same day, when he was able to speak intelligibly. and keep in his tongue; in due time, the glandular enlargement disappeared, and the case did well.

I cite this case for two reasons, firstly, the occurrence of such an unusual and abnormal complication as "glossitis" in scarlatina. I saw in Sir Patrick Dun's Hospital, about three years ago, a case of glossitis occurring during typhoid fever, but with that exception and the present instance, I cannot recall another case of glossitis occurring in connection with any exanthematous disease. Dr. Collins has recorded a case of scarlatina, the only one I can lay my hands on, which was under the care of Dr. Banks some years ago in Sir P. Dun's Hospital, in which glossitis set up about the ninth or tenth day. Recovery in this case followed free scarifications of the tongue; and it also still further confirms the value which attaches, in my opinion, to this chalybeate and stimulant treatment, in what may be called the secondary or pyæmic fever of scarlatina.—*Irish Hospital Gazette.*

THE POISONOUS ACTION OF TINCTURE OF ARNICA UPON THE SKIN.

By James C. White, M.D.

Case I.—A gentleman, sixty-five years of age, in descending the stairs to mount his horse for a ride, slipped and scraped the lower part of his back. A handkerchief dipped in tincture of arnica was immediately applied to the bruised skin of the buttocks and worn in contact with the part during the ride, which was not given up on account of injury. Before his return a good deal of itching was felt in the back, which caused the parts to be rubbed vigorously. On examination after reaching home, the skin was found to be already greatly congested, and the irritation of the parts increased a great deal during the day and night. On the next day I was called to see him. The skin of the back, nearly to the shoulders, was in a state of active hyperæmia, and already covered with innumerable papules. The inflammatory process extended rapidly downwards nearly to the knees, and forwards upon the abdomen and genitals. In a few days these parts presented all the characteristic appearances of acute eczema in its various stages of progression: general hyperæmia, papules, vesicles, excoriated and exuding surfaces, and crusts. The subjective symptoms were intense itching, stinging, and burning in the parts. Scarcely any clothing could be borne in contact with the skin by day, and sleep was for a few nights almost impossible, but the system generally was only slightly disturbed. The course of the affection need not, however, be given in detail, as it did not vary in any important particulars from that of an ordinary acute eczema of high grade and short duration; the process reaching (under treatment) its height within a week, and rapidly disappearing with the usual retrogressive manifestations.

Case II.—A gentleman, sixty years old, applied to his right arm above the elbow a fomentation of tincture of arnica on two successive days, on account of a so-called rheumatic pain in the limb. The part became generally reddened and swollen in a few days, and ten days after the applications were made he consulted me. The arm from the elbow to the shoulder at that time was considerably swollen, of a vivid redness, and covered over the lower half of this district with a very thick eruption of papules, many of which were already partially converted into vesicles. Great itching and burning were felt in the part, which gradually ceased as the inflammation subsided. The efflorescence under treatment did not progress beyond the vesicular stage, and the skin returned to its normal state in ten or fourteen days subsequently.

The nature and cause of the affection of the skin in these cases cannot, I think, be misinterpreted. In all of them we have an acute inflammatory process, confined to the upper dermal layers, and manifesting itself, according to the stage reached, by the following appearances: hyperæmia, papules, vesicles, excoriations, crusts, and scales, in regular sequence. The local sensations were intense itching and some degree of burning in the parts affected. There was no constitutional disturbance. In course, character, and

sequence of the lesions in their development and retrogression, in the intensity of the subjective and absence of constitutional symptoms, the affection is unmistakably acute eczema. It may be that cases occur in which the inflammation extends so deeply and reaches so high a degree, as to warrant the title dermatitis, but I have never seen them.

The cause was also plainly manifest. The inflammation followed in all the cases the applications of tincture of arnica to the skin as a fomentation. In one of the instances, the first, the epidermis may have been slightly broken; but in the other the skin of the parts was whole and healthy at the time of the applications. The inflammation began to show itself after intervals varying from a few hours to several days, and was confined to the part to which the applications was made, or extended from this as a centre.

These cases will serve, as well as more which might be presented, as typical illustrations of the action of arnica at times upon the skin. The affection, as will be seen, follows a very regular course in the character, distribution and duration of its lesions, differing widely in some of these respects from the wayward manifestations so peculiar to the action of rhus. Like the latter, arnica must therefore be regarded as an irritant poison when applied to the skin of some persons, but of less intensity and probably of less certainty in its action than rhus. With regard to this latter point, the proportionate frequency of poisoning after its external use, I do not know that we can form any judgment. There can be no doubt that tincture of arnica is very often used in the same way as in the cases above given. It has long enjoyed an exceptionally permanent reputation, and almost miraculous healing powers have been attributed to its Oesterlen says that "its reputation dates from the times when magicians carried on their hocus-pocus with it; from these it passed into the hands of quacks, and finally to physicians." There is scarcely a symptom of disease which, it was at one time thought in Europe, its internal administration could not successfully meet.

The physiological action of both the root and the flowers of arnica is said to be irritant, large doses producing vomiting and diarrhœa, inflammation of the stomach and bowels, headache, and dizziness. Its properties reside in an acrid resin and volatil oil. Our officinal preparations are a tincture, an alcoholic extract and a plaster. That tincture of arnica retained for centuries its great reputation as an application in bruises and sprains, and remains to this day perhaps the most popular remedy for such purposes, it may, thank the alcohol associated with it, for this beyond doubt is the only active agent in such applications.

The appearances which follow its use are no doubt often mistaken for the immediate effect, or the sequelæ, of the injury or other trouble for which it was applied. Even the physician, there can be little doubt, often fails to recognize the artificial nature of the eczema he is called to treat, and to connect it with the prior application of arnica to the skin. The almost universal belief in its harmlessness, too, would prevent in most cases the patient from communicating to the physician the fact of its use before the appearance of the disease. It is not to be wondered at, however, that physicians are so little acquainted with these poisonous properties, when we see how little mention is made of them in medical literature. The works on materia medica that I have at hand give it a more or less feeble commendation, but make no allusion to its injurious action upon the skin. Very few of the works on toxicology place arnica among the poisons and Van Hasselt, who gives the fullest account of its injurious properties when administered internally, says nothing of its action upon the skin.

It is to warn physicians who may be ignorant of these properties belonging to it, and that through them the public may be more generally informed concerning the dangerous character of one of the most popular and useless among domestic external remedies that I have thus brought the subject before the profession.—*Abridged from Boston Medical and Surgical Journal.*

GUM-CUTTING

By Charles E. Buckingham, MD,

Professor of Obstetrics in Harvard University.

For some time I have been making inquiry of physicians whom I met, and I was rather surprised to find among the younger practitioners so many who had never used the gum lancet, and who could not imagine the case in which it would be necessary.

The let-alone system of treatment is good; in very many cases it is the best; but it is not always the best. The relief afforded by a free incision through the gum in some instances in which there was acute pain has, under my observation been more marked than that afforded by any other operation that I ever saw. The tooth, it is true, in the very great majority of cases finds its way through without difficulty to the child. The first indication to the mother whose child has always been nursed, and never fed, is often the feeling of an incisor against her nipple. In some cases where a proper plan of feeding has been followed, there is as little indication of trouble during dentition. Occasionally when the child is nursed, more frequently when it is fed, and often when it is improperly fed, the little one apparently suffers pain in the mouth, in the head, and in the bowels, whenever a new tooth is about to make its appearance. In another class of badly-fed patients there is always loss of appetite at this time, with sleepless nights, nausea, and vomiting. In others, cough comes on which only exists then, and for which auscultation gives no explanation; and the little patient's sufferings are augmented by "hive syrup," squills, and other nauseants which gave no relief, and by "Mrs. Winslow's soothing syrup," and other narcotic drugs, which stupefy but do not cure. There is still another class consisting mainly of improperly-fed children, who have convulsions, sometimes slight it is true, and sometimes fatal. There is no disturbance of the nervous system so far as I know which may not exist in the teething child, and some which may not be aggravated by improper food. Indeed the time of dentition is the time when by far the greatest

number of deaths take place among children, whether the immediate cause be in the head, the chest, or the abdomen.

There are two common notions among maiden ladies who are often the advisers of mothers younger than themselves; these notions are the source of very great suffering to babies, and occasionally the cause of death. They are, that cutting the gum is very injurious, because "it may callous over afterwards and become so hard" that the tooth cannot get through so easily as if let alone; and secondly, "that the child may bleed to death," after the operation.

To the first of these the reply is, that no union of the gum after it has been cut will ever be any firmer than the gum itself was before it was cut. Cutting the gum may be as great a relief to an obstruction as when an incision is made over a bullet, a piece of bone, a splinter of wood, or a fragment of needle beneath the skin, and the system is trying alone to help it to the surface. More than this, the tooth is not only below the mucous membrane of the gum, but it may be within the sac in which it was formed, and which the force of nature is trying to perforate. If this covering be once cut across, its union (if it ever unites again) will be less perfect than before, and the patient's suffering will be relieved. Suppose the gum should heal after the incision, and the child's sufferings should recur; that is not a good reason for withholding relief now. And if it should suffer again, it can be relieved a second time, and even a third time. I never saw the case in which, if the gum lancet went well through, and was felt upon the surface of the tooth, there was any trouble with that particular tooth afterwards. It surely never could retract, and become deeper in the jaw than before.

The first effect of the incision is the relief of local pain by the oozing of blood. This is more particularly the case in those instances in which the gums are dry and hot, and there is no secretion from the mucous follicles nor from the salivary glands. An incision simply through the mucous membrane is followed by blood, and that by saliva in a very short time, giving great temporary relief; but if the lancet is felt to graze the tooth through the whole length of the incision the relief is more than temporary; the immediate covering of the tooth never unites again, the growth of the tooth and the elasticity of the tissue preventing that process. If the offending tooth be a molar, a crucial incision is better than a longitudinal one. The relief is often so great from gum-cutting that I have seen children who were crying with agony, before the operation, look up in my face and laugh through their tears and I have known a child to come to me, and show by unmistakable signs her remembrance of the benefit received on another occasion by turning her head over upon my knees and pointing to the swelling above a cuspid tooth.

The second effect of gum-cutting is the relief of obstinate diarrhœa, obstinate constipation, and of all apparent signs of diseased brain, such as vomiting stupor, convulsions, enlarged and non-contracting pupil. This relief I have seen more than once during the past year.

The second notion with which non-professional persons are possessed is the hæmorrhagic. I have no doubt that in my thirty years of professional life. I have had quoted to me, on an average, more than one case a year of fatal hæmorrhage from gum-cutting. But I never saw such a case, and I never spoke with a person who had seen one; it had always "been told to her" by some one else. I can imagine that it might be the possible result in one of the so called "bleeders;" but a prick with any other instrument in any other part would in that case be to have the same result. The nearest approach to this condition that ever came under my observation was of a young man of at least twenty five years of age some ten or fifteen years ago who died in the case of a hæmorrhage following the extraction of a tooth.

There is no operation, no medicine, which may not be followed by death. So sometimes neglect of medicine or neglect of an operation is followed by death. To offset any death resulting from gum-cutting (an accident which I never witnessed and never heard well authenticated), I could point to large numbers of infants whose comfort has been established, whose lives I believe to have been saved. There are many more, whose comfort I believe to have been sacrificed, and whose lives I believe to have been destroyed, by the prejudice against the gum lancet. *Boston Medical and Surgical Journal*

RULES FOR THE ADMINISTRATION OF ERGOT.

Dr. J. Braxton Hicks, in a lecture published in *Guy's Hospital Gazette*, Feb. 6, 1875, says: There is a rule which I may as well mention here, namely, *not to give secale if any obstacle to delivery is expected, unless we are prepared to render assistance when the pains have been roused.* I have seen the former portion of this rule enforced, but this is limiting our use of secale too much. Unless we have instruments, etc., close by, then the rule holds goods. As an instance of the employment of this drug under these circumstances, I may mention a case. I was sent for in consultation to a patient who had been a long time in labour. The pains had subsided. Two doses of liquor secalis had been given, but without any result. The uterus was still motionless. It was not in a permanently contracted condition. I therefore repeated a third dose. I waited an hour without result. Thinking that perhaps the preparation was at fault I gave twenty grains of the powder boiled in water, and drunk with the dregs. In a quarter of an hour the uterus was in full action. We had suspected some obstruction from noticing the size of the pelvis. I was therefore ready with the forceps. After waiting fairly and finding no advance the forceps was applied and the child delivered, an active uterus making the remainder of delivery safe and natural. The same would occur in a very contracted pelvis; if the uterus should fail in its activity in this case, even if we perforate first (supposing we do not think it advisable to turn) we are much assisted, and no danger is run, if we arouse the uterus into action before we draw down the child. It is

difficult to lay down rules as to when it is urgent, in cases of inactivity of the uturus, that we should stir it up to action. I remember, in my younger days, allowing the head of a premature fœtus to rest on the perinæum for twelve hours, at the end of which time there was one pain and the child was expelled. The administering of a dose of secale would at any time rouse "pains;" still, as there was no pressure, and as no ill resulted, there was no necessity. The pulse remaining good, and no aberration from the normal state existing, we may elect to wait without serious harm; it may be more convenient to get the labour over, we shall not be acting wrong in hastening matters. But when the pulse rises, feverishness begins, and the patient becomes anxious, fretful, and irritable, it is as well, the path for the exit of the child being clear, to give a dose of secale, especially if we have tried the perhaps milder though less certain measures at our hand for stirring up "pains." When the case is well selected, the full dose of secale, from half a drachm to one drachm, acts more satisfactorily as an expellent than small frequent doses. The latter tend to irritate the uterus and retain the child. If the uterus, however, be violently roused to expulsion, while the passages are unprepared or obstructed, then the uterus may injure and rupture itself, or may tear down the obstacle, rending the vagina or perinæum, or damage the child by pressure, or crush its cranial bones, or rupture the longitudinal sinus by too much overlapping.

I prefer to give ergot in the form of powder, twenty to thirty, or even forty grains boiled in water, and the whole taken; this may be repeated in twenty or thirty miuntes. There are many preparations which can be given, if proved to be good, in the equivalent doses. The ethereal tincture keeps well and is efficient, but is nauseous and liable to cause vomiting. It is prompt, and may be useful in *post-partum* hemorrhage. Ergotine has been employed in about four-grain doses injected subcutaneously. It is said to be very efficient and rapid in action, but personnally I have not sufficiently experience of it at present to speak of it more. It will be a very great advantage if ergot can be made to act promptly. Given in the form of a powder it is slow, even when previously boiled. It is more efficient if we employ the liquor or tincture; still it is then very slow for snch cases as *post-partum* floodings. In ten minutes the crisis has often passed with one of two terminations; thus, although secale is good in the milder cases of flooding, it is practically useless in the sudden forms, unless its action come in afterwards, when our more active treatment has succeeded, to secure permanent contraction. It is a questionable point whether large doses of secale do not depress the heart's action, so much as to render its employment to be avoided in extreme cases of flooding. I am inclined to think that it has this effect; but this will not affect our employing it in cases without violent flooding. If in cases of flooding before labour we want to increase uterine action, we may generally employ it, unless the patient be nearly pulseless. It is always a great comfort to feel that when the child is born, the uterus will most probably be in an active state from the previous dose of ergot.

It has also been supposed that ergot is poisonous to the child. For myself, I have no proof of its poisonous properties, but I have often seen it kill the child. If you give it in ill-suited cases—I mean where the uterus, as in many primiparæ, is already irritated, where it has already half-asphyxiated the child, by pressing on the funis, placenta, and half closing the sinuses, then a dose of secale will go far to insure its death; or if impaction be already present, and the suture overlapping, then the parts inside the cranium are pressed upon so hard as to extinguish life, or at least so to damage the brain as to make the child an intellectual wreck. Given in moderate cases, and in the true inertia, I know no drug which is so certain of producing the desired effects.—*Lond. Med. Record*, Feb. 17, 1875.

ON WAXED PAPER AS A SUBSTITUTE FOR LINT AND OILED SILK.

Dr. DYCE DUCKWORTH, of St. Bartholomew's Hospital (*Archives of Dermatology*, January), when using ointments for the cure of disease or abrasions of the skin, applies them on waxed paper instead of lint. This is the material used by pharmacists for covering gallipots, etc.; it consists simply of thin tissue-paper dipped in melted wax. A piece of this is cut of a size sufficient to extend beyond the margins of the sore place; the ointment suitable to the case is then smeared on the centre, not too thickly, and it is then carefully adapted to the affected part. It is adhesive, so that there is no necessity for strapping or bandaging; it is very cheap, and it is cooler than lint. Dr. Duckworth uses it even for extensive eczema of the limbs.—*Lond. Med. Record*, Feb. 17, 1875.

LIQUID GLYCERIN FOR BURNS.

℞ Calcis oxid., gr. iii;
Spirit. chloroformi, gr. iii;
Glycerinæ, f ʒ iiss.—M.

Charpie is dipped in the mixture, and placed over the burned surface; it is then covered with a thin sheet of gutta-percha, and the whole surrounded with a loose bandage. It is important that the charpie should be closely applied to the entire burned surface. The pain ceases almost instantly, and the sore heals very rapidly.—*Trans. N. Y. Med. Jour.*

TREATMENT OF PERTUSSIS BY INHALATION

℞ Ext. belladonnæ, M v ad x;
Potass bromid., ℈ i;
Ammon. bromid., ℈ ii;
Aquæ. f ʒ ii.—M.

Inhale one tablespoonful in the ordinary steam

atomizer; or this amount may be diluted by filling up the glass with water. In severe cases this may be used twice daily, until the urgency of the symptoms is relieved, and then continue once daily until the cough has entirely disappeared.—*Boston Med. and Surg. Jour.*

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MONTREAL, MAY, 1875.

McGILL COLLEGE.

The Annual Medical Convocation of the University took place on the 31st of March. It was announced that the number of students in attendance during the past season was 129. The following gentlemen were announced as having passed their primary examination on Anatomy, Physiology, Chemistry, Materia Medica and Botany.

Campbell James, London, O.; Colquhoun George, Grantley, O.; Cook Guy R., B.A., Aultsville, O. Cooke Wm. Henry, Drummondville, Q.; Cream Thos. N., Quebec, Q.; Crothers Wm., Clarenceville, Q.; Eberle Henry, Morpeth, O.; Cray John S. Heckston, O.; Greer Thos. A., Colborne, O.; Hunt Henry, Notfield, O.; Johnson Jas. B., Weston, O.; Lang Christopher McL., Owen Sound, O.; Levi Reuben, Montreal, Q.; Mellmoyl Henry A., Iroquois O; MacDonnell Richard L., B.A, Montreal, Q.; McRae George, Renfrew, O; Metcaife Henry J, Riceville, O.; Munro Alex., Montreal, Q; Murray Chas. H., B.A., Montreal, Q.; Powell Robert W, Ottawa, O.; Reddy Herbert L., B.A., Montreal, Q; Ritchie Arthur F., B.A., Montreal, Q.; Robinson Stephen J., Brantford, O.; Ross Wm. D, Ottawa, O.; Secord Levi, Brantford, O.; Smith Wm., Lachute, Q.; Snider Fred. S., Simcoe, Q.; Stevenson Chas. N., Sarnia, O.; Stevenson Sabine, Cayuga, O.; Storrs Arthur, Cornwallis, N.S.; Stroud Chas. S., Montreal, Q.; Young Philip R., Clarenceville, Q.

The following is the list of the graduating class:

Bain Hugh U., B.A, Perth, O.; Benson Joseph B, Chatham, N.B.; Bomberry George E., Tuscarora, O.; Brossard Jean Bte., Laprairie, Q.; Burland William H., Montreal, Q.; Christie John H., B.A., Lachute, Q.; Dorland James, Adolphustown, O.; Dowling John F., Appleton, O; Duncan George C., Port Dover, O.; Falls Samuel K., Carp, O.; Gilbert Henry L., Sherbrooke, Q.; Goodhue Perkins J., Danville, Q.; Graham Kenneth D., Ottawa, O.; Hanington Ernest, B.A., Shediac, N.B.; Hanover William, Pakenham, O; Hume William L, Leeds, Q.; Jamieson Thomas A., Lancaster, O.; Kearney Willlam J., Montreal, Q.; Langlois Onesime X., Windsor, O; Mattice Richard J., Moulinette, O.; McDermid William, Martintown, O.; Meek James A., Cornwallis, N.S; Monk George H., Montreal, Q.; Nelles James M., Brantford, O.; Ross William D, Ottawa, O.; Scott William F., Hull, Q., Tunstall Simon J., B.A., St. Ann's, Q.; Ward Michael O'B., Montreal, Q.; Wigle Hiram, Essex Centre, O.; Woods Edmund J. J., Alymer, Q.; Woolway Christopher C., St. Mary's, O.;

Three of the above-named gentlemen, Messrs. Burland, Gilbert and Woolway, are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only await their majority to receive their Degree.

The Holmes Gold Medal was awarded to Simon J. Tunstall, B.A., St. Ann's, P.Q.

The prize for the final examination was awarded to Joseph B. Benson, Chatham, N.B.

The prize for the primary examination was awarded to Charles S. Murray, B.A., Montreal, Q., and Robert W. Powell, Ottawa, O. These two gentlemen received an equal number of marks.

The following gentlemen, arranged in the order of merit, deserve honourable mention:—In the final examination, Messrs. Hanington, Hume, Bain, Ross, Falls, Ward, and Scott.

In the primary examination, Messrs. MacDonnell, Ritchie, Smith, Levi, Young, Reddy, Secord, Snider, Ross, Hunt, Guy R. Cook, and Sabine Stevenson.

Demonstrator's prize in the Senior Class, awarded to John Brodie.

Those deserving honourable mention for care and assiduity, Messrs. A. C. Fraser, James Bell, F. L. Miner, G. E. Armstrong, and William H. Howie.

Junior Class prize awarded to N. Ayer. Honourable mention, Messrs. A. Jamieson, W. B. Gibson, Fred. Campbell, F. J. Stafford, and J. J. Guerin.

QUEBEC PHARMACEUTICAL ASSOCIATION.

The examinations conducted by the Board of Examiners of the Pharmaceutical Association of the Province of Quebec, in accordance with the

Act recently passed by the Quebec Parliament, were held in this city, the latter end of April, when the following gentlemen passed the major examination and were registered as licentiates in Pharmacy:—Wallace Dawson, R. H. Bryson and J. A. Gordon; two others being unsuccessful, were recommended to continue their studies for another year. The following passed the minor examination and were registered certified clerks:—L. R. Barridon, T. W. Henderson, and Elzear Laviolette, seven others being referred back for further experience and study. The Board of Examiners met in Quebec in the second week in May for the convenience of candidates residing in that vicinity. The new Act under which these examinations have been held will be most stringently enforced from the 1st of May; and all druggists, clerks and apprentices who have not already complied with the law should at once send in their names to the Registrar, E. Muir, Esq., Place d'Armes. The "Poison Book," one of which every druggist is required to use for the registration of the sale of poisons, is now ready and can be obtained from the Registrar. The following gentelmen comprise the Board of Examiners: Nathan Mercer, Alex. Manson, W. E. Brunet, Henry R. Gray, J. D. L. Ambrosse, H. F. Jackson and Henry Lyman, *ex-officio* President. In the interest of the public it should be generally known that all physicians keeping drug stores are obliged equally with licensed druggists, to employ no one in their pharmacies as clerks or apprentices who are not duly registered under the Act.

MEDICO-CHIRURGICAL SOCIETY, MAY 7TH, 1875.

The regular meeting was held this evening, when Dr. Roddick read a paper on "Surgical Diseases of the Eye." He gave the history and treatment of three cases that had been under his care during the past five months in the Montreal General Hospital.

Case 1.—W. H., aet. 56 years, laborer, sustained an injury while blasting in the water works reservoir, on the side of the Mountain. When seen by him both eyes were closed from œdema and spasm. Removed from the outer angle of right eye a quantity of dirt, and two spiculæ of wood, each about the size of a match; eye-ball itself apparently not injured. From the left eye a good deal of dirt was removed, also a spiculæ of wood from the inner angle of the eye, much larger than those taken from the right eye.

After operation, used a solution of atropine, gave 1 gr. opium, and ordered continued application of iced water lotion.

The day after the operation there was a good deal of chemosis, for which he scarified the conjunctiva and gave a cathartic.

On the third day there was much pain, which was relieved by hypodermic injections of morphine. The cornea is also hazy; gave 1 gr. calomel, and 2 gr. opium every four hours, and changed the cold water lotion for hot poppy water fomentations.

4th day.—Eye much worse; pus in anterior chamber; there is pain in good eye, also flashes of light, &c. This condition of things was met by removal of the eye while under chloroform. After this operation patient did well, and was discharged cured, after being in hospital 6 weeks.

Case 2.—T. H., aet. 23, laborer, was injured at same time and place as case 1. Eyelids much swollen; removed gravel and spiculæ of wood, also a clot of blood and the comminuted debris of the anterior part of the globe of the eye; the external osseous boundary of the orbit was also found to be wanting. The treatment consisted in washing out the eye with a lotion of carbolized water. The wound healed well and made a good stump. Discharged with right eye intact.

Case 3.—W. T., aet. 65, was seen on 10th March last. Found double cataract, that of left eye of five years standing, the right of five months; general health good. On 12th March, dilated pupils with atropine, and after induction of anesthesia, began to operate by lower flap, but while making the incision through the cornea the man moved his head, and the operation had to be discontinued; waited for two days, and then operated as proposed before with success.

On third day the iris was found to protrude, and failed to recede under the use of silver nitrate and pressure, but soon got well by repeated puncture of the cornea with a needle.

In his remarks Dr. R. stated that were he treating case No. 1, he would insert a suture into the sclerotic wound, as he finds this procedure is highly commended by Dr. Lawson of London, and Dr. Williams of Boston—also, that Dr. L. recommends the immediate excision of the eye ball in cases where a foreign body has become lodged in the eye and cannot be removed: this course wards off danger of sympathetic inflammation, from the sound eye.

DISCUSSION.

Dr. McCallum remarked he had two cases, one in which the lid slipped, and he punctured lid at counter puncture; case did well. The other also ultimately did well, although there was escape of aqueous fluid for some time after the operation.

Dr. Fenwick had one case of operation by lower flap, also; recovery was tedious, but did well. He remarked that Dr. Williams, of Boston, uses fine sutures (black silk) to bring edges of incision together, merely engaging the conjunctiva.

Dr. Howard congratulated Dr. Roddick on the success of case 1, as the excision of eye saved the other eye. As to sympathetic opthalmia, remembers a case where removal of bad eye saved the good one, also related a case where tetanus followed injury of eye by a nail.

Dr. Reddy operated several times for cataract. In one case by Dr. Fraser lost the eye by lid slipping. the case operated by upper flap did well. In another case operated on both eyes and did well. Excised eye three times for sympathetic incision of good eye, all did well.

Dr. Trenholme related a case where the aqueous humor escaped through motion of head when making counter puncture, but by letting lid fall and keeping quiet a few moments it soon reaccumulated and allowed operation to be completed, and was successful, the patient nearly eighty years old being now able to read with comfort and pleasure. Also that glaucoma is apt to be overlooked when complicated by cataract.

Dr. Gardner related a case of injury followed after nearly a year by opacity of lens. The operation for cataract was performed without chloroform, and the lens escaped with some of the vitrious humour. Case did well.

ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE.

We are requested by the publishers, Messrs. William Wood & Co., of New York, to intimate to the profession that they will not furnish parts of sets, but that the subscription must be for the entire work. This notice is given because, as the work progresses, it is possible, from some subscribers breaking up their sets, that occasional odd volumes may be offered for sale.

PERSONAL.

Dr. Clarence J. Chipman, House Surgeon of the Montreal General Hospital, has, by limitation, resigned his position.

Dr. Cameron, Assistant House Surgeon of the Montreal General Hospstal, has been appointed to the House Surgeoncy, vacant by the expiration of Dr. Chipman's time of service.

Dr. J. D. Cline, B.A., Apothecary to the Montreal General Hospital, has been appointed to the Assistant House Surgeoncy, vacant by Dr. Cameron's promotion.

Mr. Burland of Montreal, a student of McGill College, who has passed all the examinations for the degree of M.D., C.M., but who, on account of not having attained his majority, has not yet graduated, has been appointed Apothecary to the Hospital. This was the first time this appointment was made by the Board of Governors, and we understand that much interest was taken in the contest. Mr. Burland had a formidable opponent in the person of Dr. Tunstall, M.D. of McGill College of the past session and gold medallist of his class, who was strongly recommended for the appointment by the Medical Board of the Hospital. The keenness of the contest will be understood when we state that Mr. Burland's majority was but one vote.

Dr. McNeece of Bury, Eastern Townships, sailed for Liverpool on the 1st of May in the Allan S.S. "*Peruvian.*" We understand he accepts for a short season, with a view of benefiting his health, a position of Surgeon on the Allan line.

Dr. Kenneth Reid (McGill College, 1864) and Dr. Dewolfe, also we believe a Canadian, are the Surgeons of the West side Infirmary for diseases of the Eye and Throat, situated on 8th Avenue, New York. During the year 1874, 729 patients were treated at this institution, and many important operations performed.

On Dr. Clarence Chipman's retirement from the House Surgeoncy of the Montreal General Hospital, on the 1st of the present month, he was presented by the officers of the Institution with a massive gold chain, with gold coin attached, upon which was engraved a suitable inscription.

MARRIED.

In Brockville, on the 27th April, at the residence of George E. Gascoigne, Esq., M.D., by the Rev. Canon Muloch, rector of St. Peter's, Wolfred Nelson, C.M., M.D., Assistant Demonstrator of Anatomy, University of Bishop's College, eldest son of the late Horace Nelson, Esq., M.D., to Frederika W., daughter of the late James de Long, Esq., of San Francisco, California.

In Montreal, on the 13th May, by the Rev. Mr. Chambers, John B. McConnell, M.D., Professor of Botany, University of Bishop's College, to Theodora Lovell, eldest daughter of Robert Miller, Esq.

DIED.

At Sandymount, Dublin, on the 8th instant, Sidney Sophia Morris, aged 69, relict of the late William Austin, Esq., Inspector-General of Hospitals, formerly of Montreal, and mother of Dr. Austin of Montreal.

In Bedford, P.Q., on the 14th May, M. R. Meigs, M.D., in his 35th year.