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A SECOND SERIES OF CASES OF SKIN TRANSPLANTATION BY THIERSCH'S METHOD.*

BY JAMES BELL, M.D.

Surgeon to the Montreal General Hospital: Associate Professor of Clinical Surgery McGill University.

In December, 1887, just five years ago, I read a paper before this Society entitled, "*The Treatment of Ulcers by the Transplantation of Large Pieces of Skin after Thiersch's Method.*" I then described the operation in considerable detail and gave full clinical reports of the first six cases on which I had operated,—(the patients were also presented for examination) To-night I venture to offer some further observations upon this operation, based upon the reports of thirty-six cases operated upon in the hospital since that time. These cases are taken from the hospital books, and this series includes only those in which an operation was definitely undertaken for the purpose of healing a wound or ulcer. Minor cases in which the area to be covered was estimated at less than two square inches, and all those cases in which skin was transplanted in the course of another operation, as in the removal of small cancerous or lupoid ulcers from the face, webbed fingers, plastic operations, etc., are not included. Case 31 is an exception to the first part of this statement and was included here on account of the great age of the patient (74 years). The area to be covered for chronic ulcer in this case was about one and a half square inches.

Age—In age the patients range, as will be seen from the

* Read before the Montreal Medico-Chirurgical Society, Dec. 23, 1892.

appended tabulated statement, from 10 to 74 years, there being six patients under 30, five of whom were operated upon for ulceration due to burns, and one for ulcerations caused by a machinery accident, seven patients between 30 and 40, two of them due to burns, seven between 50 and 60, eight over 60, and three whose ages are not noted, but all of whom were over 40 and operated upon for chronic ulcer.

Lesions—Twenty-five patients were operated upon for chronic ulcers of the legs, in six of whom both legs were operated upon at the same time. Two were operated upon for acute ulceration of the arms following burns *i.e.*, within a few months of the accident; one for extensive burns of the face, neck, hands and arms, three for chronic ulcers following burns, *i.e.*, ulcers which for months or years had ceased to make any progress towards healing, and three for contracted keloid cicatrices following burns. These cicatrices were dissected away and skin transplanted. One was in the axilla binding the arm to the side, one in the popliteal space flexing the leg to a right angle, and one in the lower part of the face and neck flexing the chin upon the breast and everting the lower lip. The first two of these were operated upon in two stages, that is, the scar first removed and the limb replaced in its normal position of extension, and the skin transplanted some weeks later, when the deep irregular spaces had become filled up with granulation tissue. Of the two remaining cases, one was operated upon for destruction of skin, muscle and periosteum of tibia by machinery, and one was transplanted after removal of a large epitheliomatous ulcer of the leg.

Results—In thirty-three of the thirty-six cases here reported the ulcers were completely healed—that is, covered with a good, sound skin in three weeks after operation. The three cases, 28, 33 and 36, in the appended table in which healing was not completed in three weeks will be referred to individually later on.

In the criticisms which followed the reading of my first paper on this subject, the opinion was expressed that the skin thus reproduced would not last, but that the old areas of ulceration

would soon be in the same condition as before operation. I could not then answer this objection from personal experience, but I can now say most emphatically that such is not the case. In proof of this statement I have here to-night the first patient on whom I operated in August, 1887. On three different occasions since the operation he has developed small ulcers upon the same leg, which absolutely refused to heal until they were scraped and skin grafted upon them. In every instance, moreover, the ulcer appeared, not upon the skin which had been transplanted and which remained perfectly normal, but just outside the border of the transplanted area. Three cases of this series (2, 22 and 25) returned for operation a second time. In all three the ulceration had begun in the old skin outside the originally transplanted area and at the time of operation in each case more than half of the originally transplanted skin remained sound, while extensive ulceration had occurred outside its border. Cases 2 and 3 were first transplanted from an amputated leg, the operation beginning in the first one hour and in the second two hours after the removal of the limb; no result. Case 2 of my first series was a professional beggar and returned to the hospital since I reported his case with ulceration of his leg, which, like the preceding cases, was much more extensive in the surrounding skin than in the previously transplanted area. He declined to have his leg operated upon a second time, as he depended upon this ulcerated condition to secure him his livelihood from a sympathetic public. Case 28 was that of a man aged 41 who came to hospital twenty-nine days after having been burnt with ignited varnish. His whole face, neck, forearms and hands were extensively and in places deeply burnt. He was delirious and very ill (thought to be suffering from iodoform intoxication). One eye was destroyed and the other seriously damaged. On this account Dr. Buller was associated with me in the treatment of the case. Seven weeks after admission I proceeded to transplant skin, and in order to give Dr. Buller an opportunity to complete the treatment of the eye, I transplanted skin from the patient's thighs to his forearms and hands, while Dr. Buller transplanted

a small area in the immediate vicinity of the eye. In three weeks the parts transplanted were completely covered with skin; a normal result. As I had at the first operation pretty well denuded his emaciated thighs and calves, and the face and neck were still to be dealt with (with the exception of the limited area around the eye transplanted by Dr. Buller), I advised the patient to secure some person who would allow the skin to be taken from his thighs and transplanted to the patient's face. As he was a private patient and able to pay he adopted my suggestion, and four weeks later the face and neck were transplanted with skin in this way. The young man from whom the skin had been taken was sent into the ward to allow of the healing of the thighs, when it was found that he was very ill and feverish. He had only been cursorily examined and had not been under observation at all before the operation. Further examination showed that he was in the second week of typhoid fever, from which he recovered after a very severe illness. My patient in the meantime became ill and feverish, and the skin which had been transplanted necrosed and separated within ten days, and considerable areas of ulceration again appeared upon the hands which had been perfectly healed. Some weeks later another man was secured and skin transplanted again. The final result, especially as far as the face was concerned, was not perfectly satisfactory, as the skin only took in places and a great deal of contraction followed. In this connection it is interesting to note that Herr Sick, first assistant in Schede's Klinik, Hamburg, records a case (*Centralblatt für Chirurgie*, No. 44, 1892), in which skin transplanted to the head of a ten-year-old girl from the thighs of two healthy young men, healed completely, but in the course of three weeks it broke down and as completely disappeared. A second attempt to cover the defect with skin from a sister of the patient of about the same age was unsuccessful, and only at the third operation, when the skin was taken from the patient herself, was the operation successful.

Case 35, operated upon two weeks ago and still in hospital, is that of a ten year old girl suffering from contraction of the chin upon the chest and great eversion of the lower lip by

cicatricial tissue, the result of a burn. Only a little more than half of the skin transplanted has taken in this case. The imperfect results in these two cases I attribute to the great difficulty in dressing the wound in this situation (the face), so as to retain the strips of skin in position and maintain asepsis,—in fact the latter is impossible in the immediate neighborhood of the mouth and nostrils.

Case 33, a feeble old man aged 65, with very weak circulation and suffering from asthmatic attacks, was operated upon November 18th, 1892. He had suffered from a chronic ulcer for thirty years, but about July last it became painful and began to grow hard about the edges. On admission to hospital the hard nodules about the edges were examined microscopically and pronounced to be epithelial cancer. The whole ulcer was dissected out, wide and deep, and skin immediately transplanted. The area covered was $9\frac{1}{2}$ by 6 inches. The strips of skin have all taken, but granulation points crop out between the strips in places and show much less tendency to heal than in ordinary cases. In transplanting a surface so large and so uneven as this was after dissection, it was impossible to place the skin so accurately as not to leave some little spaces uncovered. These are the spaces which still show granulation between the strips of skin. On the whole nineteen-twentieths of the surface was covered with healthy skin at the end of three weeks, and this case only differs from the others in that there is apparently not the same tendency to rapid extension of normal epithelial growth from the edges of the transplanted strips.

Case 34, a boy aged 13, met with an elevator accident on the 3rd of October last, whereby the skin, fascia, part of the tibialis anticus muscle, and a large portion of the periosteum, from the middle third of the antero-lateral surfaces of the tibia were torn off and stripped down to the ankle. These parts were replaced as well as possible, but their vitality had been destroyed and sloughing followed. When the sloughs had been removed the leg was dressed carefully from time to time until the bared surface of the tibia was covered with granulations. Skin was then transplanted in the ordinary way on the 22nd of

November last. The dressing was removed on the eighteenth day after operation, when the wound, which measured $10\frac{1}{2}$ inches in its greatest length by $6\frac{1}{2}$ in its greatest breadth, and completely encircled the leg at its inferior extremity, was found to be completely healed.

Case 36 may be briefly mentioned as a type. A young man aged 18 had both his legs burnt by falling into boiling soap in August, 1889. Healing progressed rapidly for a time and then became gradually slower and slower, until, for more than a year before admission, no progress whatever had been made, and an ulcer remained on the posterior surface of each leg about the junction of the middle and lower thirds. Thirteen days after operation the skin was found to have taken perfectly. I am enabled to present this patient for your inspection on this the sixteenth day after operation. With regard to the operation itself, it is sufficient to say that perfect asepsis, a broad-bladed and sharp razor, and ordinary manual dexterity, are the essentials to success. No preparation of the patient nor the part to be operated upon is necessary beyond the cleansing processes which are necessary in every operation.

Several of the patients here reported were taken from the out-patient department with filthy clothing and skin, and foul-smelling ulcers, direct to the operating room (having of course had a bath and thorough cleansing of the parts to be operated upon). A single dressing of dry sublimated gauze, which is usually removed at the end of the third week, is the only after-treatment necessary. When this is removed the newly developed skin is protected for a couple of weeks with a pad of gauze and a bandage. In those cases in which skin was transplanted to the face and a single dry dressing was impossible, the wound was kept moist with normal salt solution as recommended by Thiersch. This form of dressing is far more troublesome and less satisfactory than the dry dressing. All the cases here reported have been operated upon at a single operation,—that is the ulcer was scraped or dissected out and the skin applied immediately. In cases where it is necessary to dissect out a large area of skin (such as case 32) it would undoubtedly be

better to apply a gauze dressing for twenty-four or forty-eight hours to stop the oozing of blood, which is considerable, and transplant the skin at a second operation.

NOTE.—Cases 32 and 35, which were not completely healed when the foregoing was written, have recovered perfectly,—the former in six weeks and the latter in five.

NAME.	AGE.	SEX.	LESION.	RESULT.
1 Fitzgerald,	50	M	Chronic ulcer of leg.	Perfect healing in 3 weeks.
2 Parizeau, Olivier, ..	52	M	do do (both).	do do Operated upon
3 Steechan, James, ...	39	M	Contraction of right thigh.	do do
4 Foster, Bev.	35	M	Chronic ulcer following burn.	do do
5 Hudson, Henry,	49	M	Chronic ulcer of leg following scald	do do
6 Riley, Ann,	26	F	Acute ulceration of both arms.	do do
7 Hartney, John,	60	M	do of leg—burn.	do do
8 McCabe, J.	40	M	Chronic ulcer of leg (both).	do do
9 Meigs, John,	30	M	do do	do do
10 McCann, John,	32	M	do do	do do
11 Tagan, Mary,	27	F	do do	do do
12 Reid, John,	57	M	do do	do do
13 Jones, Julia,	50	F	do do (both).	do do
14 Jeff, Wm.,	47	M	do do	do do
15 Tomphey, R.,	41	M	Ulcer of forearm, machinery accident	do do
16 Ramsey, Mary,	41	F	Chronic ulcer of leg	do do
17 Hoskin,	60	M	do do	do do
18 Moretto, Joseph, ...	48	M	do do	do do
19 Inghery, Annie,	39	F	do do (both).	do do
20 Sweeney, E.,	24	M	Contract. & cicatrix of ankle after burn	do do
21 Smith, Kate,	45	F	Chronic ulcer of leg (both).	do do
22 Braceland, Patrick, ..	35	M	do do	do do
23 Brown, Wm.,	29	M	Acute burn of both arms.	do do
24 Prebun, C.,	60	M	Chronic ulcer of leg (both).	do do
25 McVeigh, E.,	46	M	do do	do do
26 Turk, Ross,	59	F	do do	do do
27 Cunningham, Ry., ...	59	M	do do	do do
28 Mowat, John P.,	41	M	Acute ulceration of face, arms and hands.	do do
29 McGarry, Mr.,	43	M	Chronic ulcer of leg	do do
30 Braceland, P.,	36	F	do do	do do
31 Piles, Mrs.,	74	F	do do	do do
32 Moore, Samuel,	65	M	Epithelioma of old ulcer of 30 years' standing.	Completely healed in 6 weeks.
33 McVeigh, James, ...	46	M	Old chronic ulcer following injury.	do in 3 do
34 Valiquette, Nap., ...	13	M	Scalding of skin after injury.	Healing complete in 18 days.
35 Franklin, A.,	10	F	Contracting claudix after burn.	Complete healing in 5 weeks.
36 Laphore,	48	M	Chronic ulcer following burn.	Perfect healing in 13 days.

ADHESION OF POSTERIOR VAGINAL WALL TO
ANTERIOR PART OF CERVIX.

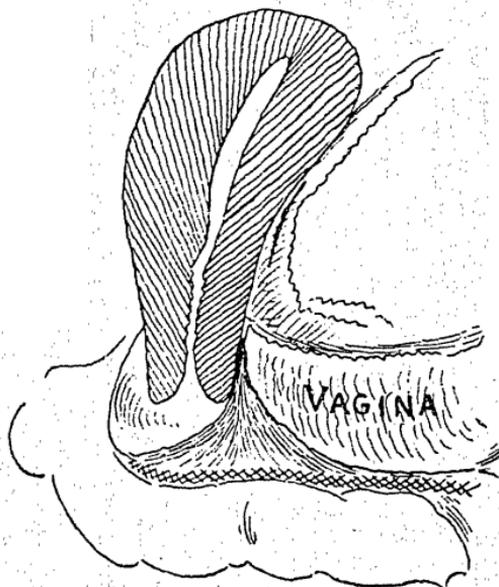
By J. ANDERSON SPRINGLE,
Professor of Anatomy, University Bishop's College.

Mrs. M., aged 27, Irish, had always enjoyed fair health to date of marriage, four years ago. She was delivered of a large child after a long, tedious labour, with instrumental aid.

Since that time she has aborted twice at the third month, suffering greatly before each mishap with pelvic distress and pain. In the intervals she did not complain either of pain or disordered menstruation.

In December, 1891, I attended her for her third abortion, which was complete when first seen. On vaginal examination, the following peculiar condition was found to exist:—

The posterior vaginal wall was raised, by a tough fibrous cord, in a tent-like manner to the anterior lip of the cervix in front of the os,



leaving an aperture on either side, through which the finger could explore the parts beyond. The adhesion measured about one-eighth inch in diameter at its attachment to the cervix.

At the time, the uterus appeared to be held down by this band.

The patient made a good recovery, and the adhesion was subsequently divided. Adhesion in this case probably was the result of her first confinement.

Whether the condition was responsible for the repeated abortions, I am unable to say positively, as she has not become pregnant since.

ANOMALOUS CASES OF PRIMARY NASAL DIPHTHERIA.*

By H. S. BIRKETT, M.D.,

Demonstrator of Anatomy and Lecturer on Laryngology, McGill University;
Laryngologist to the Montreal Dispensary.

AND WYATT JOHNSTON, M. D., MONTREAL.

CLINICAL HISTORIES—BY DR. BIRKETT.

CASE I.—K. E., aged 7. This little girl I was asked to see in consultation with the late Dr. Ross, in reference to a discharge from the right nostril. She was just recovering from a sharp attack of measles and was considered to be progressing favourably until the day before the consultation, when it was noticed that there was a thin, ichorous discharge from the right nostril, and during the day the voice became a little husky. The following morning when seen, the child was found sitting up in bed and enjoying herself with her toys, and apparently very well. Upon examination of the nose, just making its appearance within the right naris, was seen a thin membrane, quite white in colour, rather leathery in consistence, readily raised from the mucous membrane covering the septum, leaving its surface studded with several bleeding points and only in contact with the mucous membrane of the opposing inferior turbinated bone by reason of the swollen condition of the mucous membrane itself—these two conditions being sufficient to occlude that naris—the skin of the upper lip was somewhat reddened, excoriated and moist from the moderate acrid discharge coming from the affected nostril. The left nostril, after the application of a 5 per cent. spray of cocaine, was seen, by a

* Read before the Montreal Medico-Chirurgical Society, January, 1892.

careful examination, to be entirely free of anything like membrane and quite patent to respiration. The child was extremely tractable and permitted a perfect laryngoscopic examination to be made, revealing the presence of a very delicate, transparent membrane, situated upon the laryngeal surface of the epiglottis and extending directly downwards, not laterally, to and upon both vocal cords; the membrane was so delicate as to allow of the underlying hyperæmic mucous membrane being distinctly visible. The voice was only rough in tone. The following morning there was a slight, watery discharge from the left nostril, but no membrane was to be seen upon careful examination until the next day, when a membrane similar in character and situation to that which occupied the right nostril two days previously, was plainly visible, and as on the first visit a small portion of it was removed and sent to Dr. Johnston for examination. Twenty-four hours later, curiously enough, this nostril which had contained membrane, now only had a moderately thick, yellowish secretion, which was easily removed by means of an alkaline spray. The membrane in the left nostril was seen to have receded almost to the posterior third of the inferior meatus on the first day. Careful rhinoscopic examination, which the child readily permitted, revealed no membrane in the naso-pharynx, and inspection of the tonsils, fauces and pharynx, showed these parts to present nothing more than a hyperæmic condition of the mucous membrane. Five days from the onset of the trouble the mucous membrane of the nose and larynx was perfectly free from false membrane, the secretion from the nostrils being thick, yellowish coloured mucus.

The respiration, which at first was buccal, had now become nasal, and the voice increased in tone and clearness. The child's general condition was remarkable. She sat up in bed the greater part of the day and amused herself with her playthings. The pulse never reached 100, and the temperature never rose above 98.5. There was no loss of knee jerk and the urine was entirely free of albumen throughout the whole course of her illness.

CASE II.—The second case concerns a boy of eight years old,

whom I was asked to see by Dr. J. A. Macdonald. The features of this case differ from the foregoing only in one or two points: (1) The membrane made its appearance in the left nostril first. (2) The underlying mucous membrane did not bleed upon the removal of the false superimposed membrane. (3) Tended to recur after removal.

The general condition of the child's health did not seem to be effected by the existing trouble. There was no loss of knee jerk; no albumen in urine; no elevation of either pulse or temperature. There was no existing membrane in the naso- or buccal-pharynx. A striking feature was the absence of any glandular enlargement in both cases. Dr. Johnston reported Loeffler bacillus in both cases.

The chief interest in these cases is, I understand, in the bacteriological investigation, for cases of nasal diphtheria are frequently seen by us all, but the absence of all the classical symptoms may perhaps interest some. Here we found two children suffering from a dread disease which usually produces rather profound symptoms, and the fact that the characteristics of the membrane were wanting, no fetor present, no enlarged glands, no alteration in the pulse nor elevation of temperature, no nervous phenomena either attending or following the course of the disease, no reaction upon the general health of the children, made one hesitate about pronouncing them to be true diphtheria, but the presence of the Klebs-Loeffler bacillus in the one case, and of the development of an undoubted faucial diphtheria in another member of the second family, decided that we had to deal with a true specific disease. The first case, however, for the first forty-eight hours presented a difficulty in diagnosis between diphtheria and a disease only of late fully recognized, namely, fibrinous rhinitis, from the fact that this case, in its clinical aspect, corresponded to such a condition, and, moreover, it followed upon an infectious fever, namely, measles, in which, in the majority of reported cases of fibrinous rhinitis, it is especially found to follow, and only the demonstration of the existence of the Klebs-Loeffler bacillus enabled us to make a positive diagnosis.

BACTERIOLOGICAL EXAMINATION OF THE MEMBRANE—
BY DR. JOHNSTON.

In Case II the membrane, microscopically, showed fibrillar structure, but did not give the staining reaction of fibrin. By Weigert's stain, fibrin can be readily distinguished under the microscope. The fibrin filaments come out bright blue, and many bacteria, notably the diphtheritic bacillus, are also stained. In the present case the number of bacteria was very small, and the results were atypical.

Cultures from the exudation had an appearance not quite the same as that of the diphtheria bacilli, being coarser and somewhat yellowish. Microscopically, the bacilli in the cultures had exactly the appearance of the diphtheritic bacilli. I inoculated the conjunctivæ of two rabbits, having first wounded the membrane by scratching, but did not succeed in producing any diphtheritic exudation. On account of these negative results I thought it was not a case of diphtheria. I preserved the cultures, however, and some months afterwards, in working over some old cultures, I experimented with these and found they possessed the property of growing on serum in twenty-four hours, and, invisibly, on potatoes. This made me think they might after all be the true diphtheria bacilli. I injected some of the cultures subcutaneously into a guinea pig, and found it killed in a typical manner, so that after all we had to deal with true diphtheria. The rabbit is a more refractory animal than the guinea pig towards diphtherial virus, and I had at first probably a mixed culture, which afterwards became purified on being passed through serum. Thus we had a curious exudation which had not the ordinary characteristics of the diphtheritic exudation, either to the naked eye or to the microscope, where the patient was apparently not at all sick, and yet where we got finally positive proof that we had the genuine Loeffler bacillus to deal with.

In Case I, I received a small piece of the dried membrane about the size of a pin-head. I moistened this and made cultures in the usual way, and obtained a very abundant growth of colonies with all the general appearances of the diphtheria bacillus.

To test their nature I inoculated a guinea pig in the usual manner, and the animal died within forty-eight hours with the typical infection. Here there is no doubt we had a case of anomalous exudation caused by the diphtheria bacillus.

In neither of these cases were there any diphtheritic paralysis. The children recovered perfectly.

Important studies on the ætiology of fibrinous rhinitis have appeared, one by Koplik, in the *New York Medical Journal*, August 27, 1892, and the other by Park, in the *New York Medical Record*, 1892. Both observers met with cases in which there was a membranous inflammation of the throat of an anomalous character; they varied greatly in severity, sometimes forming a mere film of exudation and at other times forming a thick fibrinous layer. Altogether ten such cases were observed where the diphtheria bacillus was found. They even found the diphtheria bacillus in cases which presented no membrane at all—in cases of catarrhal sore throat, and in cases of what was apparently follicular tonsillitis. A. C. Abbott (*Medical News*, May 13th, 1893) has also described three mild cases of fibrinous rhinitis where the Lœffler bacilli were found. We, therefore, have certain anomalous inflammations of the mucous membrane of the throat and nose, which do not anatomically or clinically present the picture of diphtheria, but in which the diphtheria bacillus is present, and there is very little doubt that it is the causative agent of the condition.

There are some points that are interesting in connection with these cases. Why does diphtheritic inflammation sometimes run such an anomalous course? Is there any connection between the anomalous anatomical condition and the absence of fever, swelling of the glands, albumen in the urine, subsequent paralysis typical of the effects of the diphtheritic poison? We are only beginning to learn how this poison works. The anomalous condition was apparently not due to any weakness in the virus, but to some power which the patient has of resisting its action—a condition of partial immunity. It would be interesting in such cases to find experimentally whether the serum of such individuals possessed undue resisting powers to the

bacilli compared with the serum of other people. An artificial immunity against diphtheria may be induced by inoculation with modified virus, or the injection of small quantities of poison into animals, and the serum of such animals inoculated into others gives protection. Whether there is another specific disease condition, fibrinous or pultaceous rhinitis (which latter is the French term applied to this anomalous condition), is a matter which is not yet clear. A number of cases have been now examined, and Abel claims that fibrinous rhinitis may be set up by the pneumococcus (the specific agent in pneumonia).—*Centralblatt Bakt.*, Dec. 28, 1892. It may be mentioned that the first of our cases (Case II) was recorded in the MONTREAL MEDICAL JOURNAL, September, 1891.

MISSED ABORTION.*

By J. D. BALFOUR, M. D., LONDON.

CASE I.—This case occurred in the practice of Dr. Meek, London.

Mrs. H, aged 40; married 17 years; number of children 7 (two living and three dead); last confined seven years ago, child born prematurely; one miscarriage eight years ago at the fourth month; was operated on three years ago for lacerated cervix and perineum. Health good since operation, and menstruation regular every four weeks and normal.

On the 11th of December, 1891, sought medical advice to see if she were pregnant. She had been quite regular up to the first week in the previous November, when she last menstruated. On examination the uterus was found to be enlarged, and she was informed that she was probably pregnant.

Was not heard from again until first week in April, 1892, when she again applied for medical aid. She was suffering from pains in the back, bearing down, and had a slight flow of bloody fluid,—symptoms of threatened abortion. On examination os quite small, uterus large and soft, corresponding in size to four and half months pregnancy. Said she had felt life.

* Read before the Canadian Medical Association, at Ottawa, September, 1892.

Rest in bed and fluid extract of viburnum stopped all pain, and she became quite well in a day or two.

Was not heard of now until August 19th last. She had been very well in the interim, except some slight pain occasionally and imagined that pregnancy was going on all right. Expected to be confined about August 13th.

On August 19th she had bearing down pains which she considered labour pains, and again sent for medical assistance. Examination p. v. showed os small and with no sign of dilating, uterus about same size, probably a little smaller, as when examined in April. There was no show. A diagnosis of missed abortion was arrived at, occurring in April. She was admitted to the London General Hospital, and on the morning of the 22nd of August, the patient under chloroform, the cervix was dilated with a steel dilator. The ovum forceps were then passed, the sac which contained a small cupful of dark, greenish coloured fluid, ruptured, and a softened fœtus of about 4 months growth removed in pieces.

The covering and placenta, as far as possible, was also removed, and the uterus then thoroughly curetted with a large moderately sharp spoon. The uterus was then washed out with a weak solution of corrosive sublimate, the cavity swabbed out with Churchill's iodine and a strip of iodoform gauze introduced for drainage.

Temperature normal till fourth day when gauze was expelled and removed. A douche of corrosive sublimate was now ordered, after which temperature ran up to 101 3-5.

On examination a piece of decomposing foetal coverings was found and removed, and the uterus again washed out, with a permanganate solution, and iodine applied. Temperature now fell to normal and recovery went on without interruption.

Peculiar features :

1. Long ($4\frac{1}{2}$ months) retention of fœtus after death without any symptoms of importance.
2. Non-absorption of the liquor amnii.
3. Undilated os.
4. How, even after carefully curetting, portions of the coverings may be left in the uterus.

CASE II.—Mrs. McK., aged 34; married 12 years; had four children, two living and two dead; had no miscarriages. Admitted into London General Hospital November 28th, 1891; was weak and somewhat anæmic; had been troubled with rheumatism.

Confined on the evening of January 22nd, 1892. With the child was expelled a small dead foetus about four inches long. It was squeezed into a thin parchment-like form, and resembled thick nut-brown paper in appearance.

It was perfectly formed and no doubt died in utero about the end of the fourth month. The woman could give no history of pain or trouble of any kind at or about that time.

The case was otherwise perfectly normal.

The patient left the hospital on February 5th.

A CASE OF OCCIPITAL MENINGOCELE.*

By KENNETH CAMERON, B.A., M.D.

Lecturer on Hygiene, University of Bishop's College.

Meningocele is a congenital hernia of the membranes of the brain through an opening in the skull, the protruding sac being filled with fluid, but containing no cerebral substance; the most frequent situation for it to occur is in the occipital region in the middle line. The following case is a typical illustration of this fortunately rare malformation.

On the evening of the first of November last I was called to see Mrs. A., in whom labour had just commenced. She was a primipara, a large, strongly built woman above the average height and weight. The course of pregnancy had been uneventful and had reached full term. The pains were so sharp and the pelvis so roomy that a rapid and easy delivery was expected, but after a little the pains became less frequent and less severe, until they finally ceased and did not commence again until next morning at 10 o'clock. The position was right occipito-anterior, and the head very soon began to bulge the perineum, where it remained, though the pains were severe and the expellant force great. The cause of the delay could not be

* Read before the Montreal Medico-Chirurgical Society, February 3, 1893.

determined, so after waiting an hour chloroform was administered and the forceps applied. Even with this assistance at first no advance was made, but suddenly the head was delivered and the cause of the obstruction found to be a tumour on the back of the child's neck. The child did not breathe for some time and not freely for over an hour. The mother's recovery was rapid and complete. The child was a well formed, well nourished female of about 7 pounds weight. On the back of the neck, just below the occipital protuberance was situated a large irregular, slightly lobulated, sessile swelling, the greatest circumference being around the base and measuring $8\frac{3}{4}$ inches, horizontal measurement $3\frac{1}{4}$ inches, longitudinal measurement $4\frac{1}{2}$ inches. The occipito-frontal circumference of the head was $13\frac{3}{4}$ inches.



The skin over the upper segment was normal looking and covered with hair, but over the centre was very thin and translucent. The tumour was quite irreducible, no pulsation could be felt, but there was a marked increase in tension when the child cried, and when pressure was made the child ceased crying; no other symptoms were produced even by hard pressure; a distinct wave of fluctuation was felt, not only through the tumour itself, but between the anterior fontanelle and the tumour; there were no paralyses. In addition to this deformity there was a cleft palate, the fissure involving the soft and hard palates in the

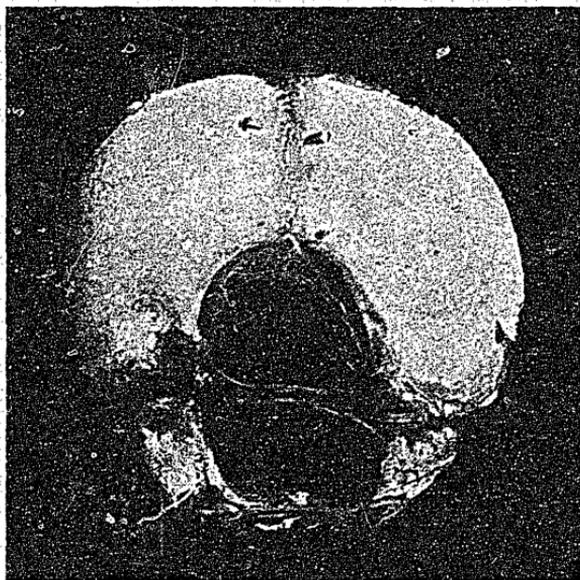
median line as far forward as the inter-maxillary bone, but no further; there was no hare-lip. In every other respect the child was perfectly formed; the bowels and kidneys acted well within twenty-four hours. The child being quite unable to suck, great difficulty was experienced in feeding it; the mother's milk, of which there was a plentiful supply, was carefully drawn off and administered with a spoon, but within a few days it became evident that digestion was imperfect, the milk passed more or less unchanged and the stools became green, but on the milk being peptonized they assumed a more normal appearance. Increase in the size of the tumour and marked increase in the tension was observed from day to day, the child became very fretful, crying and moaning, and sleeping but little. On November 10th, eight days after birth, assisted by Drs. Allan and Springle, I operated. An incision was made in the median line and the skin dissected down to the base. Three and a half ounces of clear, straw-coloured serous fluid were slowly removed through a trochar and the sac was then opened. It was formed by the distended membranes and contained no cerebral substance. The opening, which was separated from the foramen magnum by only a thin band of membrane, was $\frac{7}{8}$ of an inch in diameter and almost circular, and through it could be seen the medulla and upper part of the cord.

The superabundant membranes and skin were cut off, the edges of the sac being brought together by a purse-string silk suture, and the skin wound united by buried silk sutures and enveloped in an iodoform and sublimated gauze dressing. The wound healed by primary union, the dressings having been changed on the second and tenth days.

The condition of the child was greatly improved after the operation; she slept well, cried but little, took her food and digested it well, and gained in weight. This improved condition lasted for two weeks, when an acute gastritis was set up, the milk was rejected and the stools again became green, and in spite of all treatment the child rapidly sank, wasted and died on December 3rd, just thirty-three days after birth. As the child failed it was evident that the hydrocephalus was rapidly increas-

ing. At no time, however, were there symptoms pointing to cerebral irritation, except during the last two days, when slight twitching of the mouth and eyelids was observed.

A post-mortem of the head only was obtained. On opening the skull a little over an ounce of clear serous fluid escaped, the membranes and surface of the brain were pale and showed no signs of inflammatory action. Considerable thickening was ob-



served about the site of the incision which had completely united. The lateral ventricles were considerably dilated, but nothing abnormal observed about the fourth ventricle. The opening in the occipital bone is continuous with the foramen magnum, and extends through nearly half the diameter of the occipital portion of the bone; it measures one inch in its greatest breadth.

Hospital Reports.

MONTREAL GENERAL HOSPITAL.

REPORTS OF CASES IN DR. STEWART'S WARDS.—CASE OF MALARIA COMPLICATED BY PNEUMONIA.

(REPORTED BY C. J. MARTIN, M.D.)

M. M., aged 51, was admitted to Montreal General Hospital November 4, 1892, complaining of daily recurring chills and general weakness.

The illness had commenced in St. Paul, Minn., 12 days prior to admission (viz., October 23rd), at 1.30 p.m., when patient had a sudden and severe rigor lasting about one hour and attended with fever and great sweating. Patient had previously been in excellent health and engaged in his daily duties in connection with a travelling circus. Several of his friends, who were near St. Paul and who belonged to his band, were similarly affected at the time. From the onset of his illness patient had daily chills, each occurring about 1.30 p.m., and followed by hot and sweating stages.

On the ninth day of his illness he left St. Paul for Montreal, arriving November 4th at about 1 p.m. at the Montreal General Hospital, having had chills throughout his journey. Soon after entering another chill supervened, patient being much prostrated. Temperature $105\frac{1}{2}^{\circ}$, pulse 122, respiration 36.

Personal History—Indian, residing at Caughnawaga, where he had spent most of his life on a farm, while in winter he frequently visited the lumber shanties on the Ottawa River. A few months previous to his illness patient went to St. Paul, remaining in the city until his return here November 1st. During all this time he visited no other city, nor is there any history of his ever having been in another malarial district. Never had malaria before. Family history negative.

General Condition on Admission—Much emaciated and anæmic and in great prostration; bony points prominent. Skin dry and hot; conjunctivæ subicteroid. Pupils reacting normally. Suffering pain about abdomen, but no tenderness any-

where. Digestive system—Tongue thickly coated with dirty greyish fur, indented by the teeth, and sordes about lips, teeth and gums; no herpes; appetite very poor; no vomiting nor gastric discomfort, constipation for four days previous to admission. Abdomen relaxed; liver dullness normal, edge could be felt immediately below costal margin; no splenic enlargement discernible. Respiratory system—Sputum consisted of thick muco-pus; no cough. Respiration 24, costo-abdominal, expansion of chest good, chest well developed. Tactile fremitus normally present. Percussion revealed no dullness nor other abnormal auscultation. Breath sounds harsh in both infra-clavicular regions, where also a few moist rales were heard; elsewhere no adventitious sounds; V. resonance normal. Circulatory system—Arteries sclerosed, but otherwise no evidence of disease.

Blood Examination—Showed presence of plasmodium malarie in various forms, especially the amœboid and free pigmented varieties.

Urine, immediately after chill, high colored and very dark reddish, thin in deposit; 1024, acid, no albumen nor sugar, no trace of urobilin, no casts; urea 12 grs. to $\bar{3}$ fl. Quantity during first 24 hours diminished.

Diary of Treatment—Rest in bed; fluid diet. During night of November 4th patient slept well, and on morning of 5th temperature decreased to 98° . Temperature remained normal up to 1.45 p.m., when without any other symptoms it rose to $101\ 3\text{-}5$, and at 2 p.m. patient had another chill, temperature at 2.30 being $104\ 3\text{-}5$. Blood was again examined and amœboid variety of plasmodium found.

Quinine was administered the same evening for the first time, 30 grs. in all being given in divided doses up to 10.30 a.m. of 6th. Patient, nevertheless, had another chill at 1.30, temperature at 2.30 rising to $105\ 3\text{-}5$. No more quinine was given during the succeeding 24 hours and patient passed the day of the 7th without any chill, temperature never rising above 100° . For the next three days quinine was administered in doses of 10 grs. three times daily, according to the usual methods, and patient had no more chills.

On the day of the 11th at 8 a.m. temperature was $101\frac{1}{2}$. Lungs examined and found negative, respiration 20, pulse 88. Two days later slight dulness was discovered over the base of the right lung, with crepitant rales and diminished breath sounds. Tonic and stimulating treatment was at once administered. On following day patient seemed greatly weakened, had severe dyspnoea and expectorated a large quantity of thick muco-pus tinged with blood. Examination of lungs showed increased area of dulness with blowing breathing at angle of scapula and large crepitant rales.

Slight jaundice was now noticed for the first time, the urine containing bile and the stool being light colored. Two days later patient developed a most intense jaundice, while in every way his condition became much more grave. Patient coughed up copious thick greyish purulent sputum. Examination for bacilli negative. Respiration 38, pulse 124, temperature $99\ 2\text{-}5^{\circ}$. Right lung showed signs of consolidation up to the spine of scapula, with marked blowing breathing and crepitation. Vocal resonance and fremitus greatly increased.

In front increased vocal resonance in right infraclavicular region, with distant blowing breathing and cogwheel respiration in the region below.

Examination of blood revealed no plasmodia, but marked leucocytosis.

Urine, dark golden yellow, 1022, acid, trace of albumen, numerous bile-stained casts; no blood; $\frac{3}{4}$ LX of urine in past 24 hours; urea 12 grs. to $\frac{3}{4}$ fl.

For past three days enemata were given, patient being unable to retain any food on his stomach.

From this time onward patient's condition became more and more grave, till on November 18th patient died at noon.

Only a partial autopsy could be obtained. The right lung was found in a stage of grey hepatization, the organs all bile-stained, the spleen not enlarged.

Reviews and Notices of Books.

Transactions of the American Ophthalmological Society—Twenty-eighth Annual Meeting, held at New London. Hartford: Published by the Society; 212 pp. 1892.

The proceedings of this Society for 1892 contain much interesting matter and supply plenty of food for thought.

Kollock, of Charleston, has a paper on the eye of the negro and its pathological status. He finds myopia, convergent squint and trachoma rare; xerosis common. On the other hand refractive errors, especially myopia, are common among mulattoes. The eye of the negro is retrograding from three causes, civilization, syphilis, education.

In the course of the debate on this paper, Burnet said that syphilis in the negro ran on rapidly to suppuration of the glands and hence not so much of the virus is retained as among whites.

Bull reports five cases of intracranial lesions with defective visions and the autopsies. The first case was one of pachymeningitis of convexity of brain and basal endarteritis. The patient, a woman of fifty, had a severe mental shock, followed by convulsions, subsequently severe neurasthenia lasting for months. Profuse menorrhagia came on; night blindness appeared, with increasing loss of vision. Subjective and objective central scotoma for form and colour. Headaches now occurred, severe boring at vertex, but later became duller and occipital in position. The other eye began to fail, while the first eye developed neuroretinitis, which ran on to atrophy. Unilateral convulsions and transient amblyopia in the second eye ensued, and finally general convulsions, ending in death.

As to cause and effect, Bull thinks that the endarteritis existed before the mental shock, and the latter hastened the progress of the arterial degeneration and indirectly the pachymeningitis. The neuroretinitis was due to the continued loss of blood.

The night blindness as the first symptom of loss of vision is unusual, as there was no extensive retinal lesion of fundus and none at all of periphery.

The second case was one of sarcoma of the chiasma and optic nerve in a man of 24. Symptoms were headaches, at first frontal, later of whole head. Six months later twitching of arms and face and occasional vertigo. Only one convulsion occurred. Vision failed, discs became hyperæmic, and later atrophic. Coma supervened and death followed.

In addition to the tumour, the skull was thickened over the left frontal parietal suture, and the dura was adherent to it.

The third case was a man aged 37 years, with sarcoma of left occipital lobe. Symptoms, right hemianopsia and complete anosmia. Post-mortem, in addition to the tumour, atrophy of olfactory lobes and nerves was found.

The fourth case was a woman 72 years old with Thrombosis of middle cerebral artery and recent clot in the middle cerebral lobe and sarcoma of the right optic tract. Symptoms—Two years before death, suddenly blind in left eye, mental confusion, numbness right arm and leg, gradually improved but left hemianopsia remained. Headaches severe a year before this attack, after the attack slight ptosis of both upper lids set in; no diplopia; speech thick and slow; tongue pointed to left; partial right facial paralysis; some opacities lenses; no other eye symptoms.

Patient had aortic valvular disease obstructive murmur and hypertrophy of heart. Twenty months later became suddenly comatose and died.

The fifth case was a man aged 35, with gliosarcoma of cerebellum. Symptoms: headache, general in extent; occasional vertigo; paralysis of both external recti; paralysis of sensation of left side of mouth, pharynx, tongue and lips.

Dr. S. O. Richey read an article on the prime factor of glaucoma being constitutional. He holds that glaucoma is mainly a disease of increased filtration or secretion,—that behind this there must be a constitutional factor, and the uric acid diathesis fills the bill,—true gout corresponding to acute glaucoma and rheumatic gout to chronic simple glaucoma: "The clinical history of the seizure of acute gout and acute glaucoma, and the anatomical peculiarity of the regions presented a picture of great mimicry." Chronic glaucoma is, he holds, a neurosis, "a progressive atrophy, the feature being

"inflammation with deficient power, varied by periods of apparent rest."

By correcting and controlling individual habits, especially in the character and amount of food taken, more will be done to preserve vision than by operation. The neurosis is favoured by the production of toxic substances in the bowels, due to improper feeding.

Dr. Holt reports a case of orbital cellulitis spreading to temporal region, thence to neck and finally to the brain, causing death.

Dr. Sutphen reports one successful case of cerebral puncture for detached retina, and another case improved.

Dr. Harlan publishes some interesting statistics of the direction of the principal meridians in binocular astigmatism. Out of 1,200 cases, 70.14 per cent. were symmetrical, 29.86 per cent. were asymmetrical.

Dr. Swan Burnett, in an article on the general form of human cornea, shows: 1st. The cornea diminishes in curvature from the centre to the periphery. 2nd. The diminution is more rapid on the nasal than the temporal side.

Dr. Theobald, removed a piece of steel from vitreous chamber on the eleventh day, with the electro-magnet. The vision retained was nearly normal.

Dr. Buller communicated a case of foreign body imbedded in retina for some time, later on apparently breaking loose (at any rate disappearing) a diffuse hyalitis setting in.

Dr. Oliver has a very interesting paper on the clinical value of repeated careful correction of manifest refractive errors in plastic iritis. In his own words: "In nearly every case of iritis, especially plastic, there is a period, even after full pupillary dilatation has been seemingly artificially obtained, during which, owing to persistence of inflammatory changes in the uveal tract, as so expressed by clinical evidences of ciliary spasm, &c., graduated instillations of mydriatics should be employed. The duration and gravity of this period being most accurately measured and determined by the systematic and repeated estimation of the varying errors of refraction.

Die Lehre von den Naseneiterungen mit besonderer Rücksicht auf die Erkraukungen des Sieb- und Keilbeins und deren Chirurgische behandlung—
Mit 5 abbildungen. Von Dr. LUDWIG GRUENWALD, in München. 163 pp. München und Leipzig: verlag von I. F. Lehmann. 1893.

This work of Dr. Ludwig Grünwald, of Munich, is an elaborate treatise on rhinorrhœa, acute and chronic. A very small part of the book is devoted to the nose proper, the major part consisting of a series of articles on pus formation in the adjoining cavities. A valuable feature of the work is the liberal supply of illustrative cases which have from time to time come under Dr. Grünwald's observation.

For diagnostic purposes in chronic rhinorrhœa the author follows the method of repeated puncture with the sharp needle or sound in various directions, to discover, if possible, carious bone.

In Case XV, p. 44, a patient suffering from ozena, he thus discovered caries of ethmoid, sphenoid and superior maxilla. Treatment by free opening and chiselling resulted in a cure of the odour in three weeks and diminution of the secretion. He explains the asthenopia so frequently complained of in disease of the nose and cavities about it thus: The suppurative process occurring immediately under the base of the skull near, and sometimes immediately bordering on the optic nerve, sets up in the neighbourhood of this nerve an irritable hyperæmic condition. Every effort or strain which brings more blood to the brain must increase this irritable condition. Especially must every effort on the part of the eyes, preferably accommodation, supply it more richly with blood, and in this condition set up a feeling of discomfort in the organ, which can only be overcome by withdrawing the attention from the object looked at, this being caused by an unconscious opposition of the will to the fixation of the object. The object is uncertain and is observed perhaps with oscillating visual axes, perhaps with purposely false action of accommodation, and hence appears to the psychical, if not the physical vision, indistinct.

The surgical treatment is dealt with at some length and

thoroughly, but the especial value of the book lies in the record of cases. Although mainly intended for the specialist, we can strongly recommend its perusal by the general practitioner.

Naphey's Modern Therapeutics, Medical and Surgical, including the Diseases of Women and Children. A compendium of recent formulæ and therapeutical directions from the practice of eminent contemporary physicians, American and foreign. Ninth edition, revised and enlarged. Vol. II, general surgery, gynæcology and obstetrics. By ALLEN J. SMITH, M. D., Professor of Pathology, University of Texas, Galveston; late Assistant Demonstrator of Morbid Anatomy and Pathological Histology, and Lecturer on Urinology, University of Pennsylvania, and J. AUBREY DAVIS, M. D., Assistant Demonstrator of Obstetrics, University of Pennsylvania; Assistant Physician to Home for Crippled Children, Philadelphia. Philadelphia: P. Blakiston, Son & Co. 1893.

The ninth edition of this valuable work has been carefully revised and brought up to date. The present volume includes surgical, gynæcological and obstetrical therapeutics. A large amount of new material has been added to keep pace with the progress made, especially in surgery and gynæcology. The whole is most carefully indexed, there being a separate index for authors quoted, another for remedies and remedial measures, and a third for diseases. This adds much to the value of the work as a book of reference, and as such we cordially recommend it.

A Manual of Clinical Ophthalmology. By HOWARD F. HANSELL, M. D., and JAMES H. BELL, M. D., with 120 illustrations, pp. 231. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1892.

Drs. Hansell and Bell have added another to the large list of small works on the eye already published.

Under a certain size it is impossible to produce a clear and comprehensible hand-book on the eye; condensation beyond this point tends to scamping and confusion.

The authors, we feel, have come dangerously near this limit,

for as the work is meant for students and general practitioners and not for specialists, it stands to reason that nothing in the way of previous knowledge of eye diseases should be premised; every point should be made clear.

This certainly is not the case with this little book, and is most glaringly marked in the description of the treatment of sympathetic ophthalmia, *i.e.*, Treatment: "Enucleation of the eye inducing irritation in the first stage; local remedies and mercurialization in the second stage, with enucleation of infecting eye if hopelessly blind." Again, in referring to coloboma iridis, the usual position or cause is not mentioned, two lines sufficing for the subject. The orbit with its diseases, of such vital importance, is treated of in a page and a half. In embolism of retinal artery no treatment is said to be of any avail. (?) In the article on retinoscopy the plane mirror is used, and we notice that duboisine is the favorite mydriatic. We are glad to observe that Maddon's valuable cylinder test for heterophoria is mentioned.

On page 195 a solution of 1-5000 bicloride of mercury is to be used for disinfecting instruments. (?) We must say we would be sorry to try any of our delicate cutting instruments in this way. The illustrations, which are numerous, are all borrowed.

Diseases of the Eye—A Practical Treatise for Students of Ophthalmology. By GEORGE A. BERRY, M.B., F.R.C.S.; Ophthalmic Surgeon Edinburgh Royal Infirmary; Lecturer on Ophthalmology Royal College of Surgeons, etc. Second edition, revised and enlarged; pp. 727, 197 illustrations. Philadelphia: Lea Brothers & Co. 1893.

It is with great pleasure we hail the appearance of a second edition of the able text-book on diseases of the eye by this talented ophthalmic surgeon. A great deal of the matter has been re-written, much new matter added, and the few defects of the first edition rectified. It now stands out as one of the best, if not the best, text-book on the subject in the English language. The opening chapter on the examination of the eye has been greatly extended in this edition, and all the latest methods taken into consideration. A new chapter on

the theory of the ophthalmoscope is added and many new illustrations, mostly colored, inserted.

In the chapter on diseases of the lachrymal passage the author expresses himself as averse to the manual dilation of the duct, practised by so many surgeons. Under Conjunctivitis we find a description of hyperplastic subconjunctivitis and of electric ophthalmia.

Dr. Berry favours pyoktanin in cases of dendriiform keratitis after scraping the rills. He considers neuroparalytic keratitis to be most likely mycotic and not neurotrophic.

The article on cataract is lengthy and exhaustive. There is an elaborate description of Magnus' experiments in the artificial production of cataract by feeding rabbits on naphthaline and the deduction therefrom obtained. The cataract in adults is due to circulatory disturbance in the nutrient fluid of the lens, or less frequently to alteration in the chemical constitution of the nutrient fluid. Mention is made of glass-blowers cataract, which is generally left-sided, and probably caused by exposure to the actinic rays in the work.

The articles on optic neuritis from brain lesions, on glaucoma and on detached retina are well worked out in full detail. The rarity of neuritis in cerebral abscess is touched on. An entire chapter is devoted to the subject of sympathetic ophthalmia, Dr. Berry favoring the theory of transmission of the irritant along the optic nerve.

The concluding part of the book is devoted to the operations on the eye, which are described *in extenso*. As to the book itself, the matter is good, the English is good, and the printing is good. It is a valuable, trustworthy aid to the specialist as well as to the general practitioner and student.

Scab Healing and Its Application in General Surgery. By J. DELPRATT HARRIS, M.R.C.S., Eng.; Surgeon Devon and Exeter Hospital; Senior Surgeon Exeter Lying-in Charity, etc. London: H. K. Lewis. 1893.

In a monograph of twenty-eight pages the author sets forth the advantages of a perfectly dry dressing to wounds, in order to better imitate nature's method of obtaining union under a scab. For this purpose he uses sawdust of pine, cedar or

eucalyptus. He recommends horse hair as a material for drains, when such are required, but does not mention whether any special method of preparation is needed to render the horse hair suitable for this purpose. As the author himself states, this method of dressing would be most useful in countries where it is difficult to obtain a supply of the ordinary antiseptic dressings, as sawdust can readily be procured in any part of the world.

Various Forms of Hysterical or Functional Paralysis. By H. CHARLTON BASTIAN, M.A., M.D., F.R.S.; Fellow of the Royal College of Physicians, London; President of the Neurological Society of London; Professor of the Principles and Practice of Medicine and of Clinical Medicine in University College, London; Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic. London: H. K. Lewis, 136 Gower street. 1893.

One of the most notable contributions to neurological literature for several years. We have had any number of works on the nervous system recently, but, with few exceptions, they are the productions of men who have nothing new or valuable to tell us. Dr. Bastian furnishes us with a volume full of thoughtful suggestions. The work, quite irrespective of its merits as a contribution to functional paralysis, is well worthy of and will well repay perusal.

Formulaire Des Medicaments Nouveaux et Des Medications Nouvelles. Par BocQUILLON-LIMOUSIN, avec une introduction par HENRI HUCHARD, Médecin de l'Hôpital Bichat. Quatrième édition. Revuée, corrigée et augmentée. Paris: Librairie I. B. Baillière et Fils. 1893.

This small work contains an excellent *resume* of the pharmacology, therapeutics, doses and mode of administration of the important drugs at present employed. The very numerous recent introductions into the *materia medica* receive due attention. The volume will prove useful to all practising physicians.

The Modern Antipyretics; Their Action in Health and Disease. By ISAAC OTT, M.D., former Lecturer on Experimental Physiology, University of Pennsylvania. Second edition, revised and enlarged; pp. 124. Easton, Pa.: E. D. Vogel. 1892.

When the first edition of this valuable brochure appeared we had pleasure in writing in the highest terms as to its value. The second edition is thoroughly revised and contains references to the most recent literature.

Mineral Springs and Health Resorts of California, with a Complete Chemical Analysis of Every Important Mineral Water in the World. A prize essay by WINSLOW ANDERSON, M.D., M.R.C.P. Lond.; M.R.C.S. Eng., etc.; joint editor and publisher of the *Pacific Medical Journal*. San Francisco: The Bancroft Company.

On this Continent balneotherapy has not as yet received the attention which it has in Europe, although springs of mineral waters having decided therapeutic actions are to be found in all parts. This being the case, we owe a debt of gratitude to the author for giving us this book, which contains, besides a list of the mineral springs and health resorts of California, as indicated in the title, much useful information about the medicinal use and therapeutic actions of the waters, uses of baths, mud baths, etc.

Appended is a list of the principal springs of Europe, Canada and the various States in the Union, with a chemical analysis of each. Information is also given regarding the history, climate, rainfall and range of temperature in California, as well as the best routes by which to reach the various health resorts.

—Twenty-three states, one territory, and the Cherokee and Choctaw nations are protected against quackery by medical examining boards.—*Jour. A. M. A.*

—Osler (*Amer. Jour. Med. Sc.*, Jan., '93) says that tuberculosis is a not uncommon cause of pericarditis, and is usually due to infection of the membrane from caseating mediastinal lymph glands.

Society Proceedings.

THE MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, January 20th, 1893.

JAMES STEWART, M.D., PRESIDENT, IN THE CHAIR.

Band of Adhesion between the Cervix Uteri and the Vagina.—

Dr. J. A. SPRINGLE read the report of a case which appears on page 888.

Dr. SMITH has had many cases, in the Montreal Dispensary, of women between 40 and 60 years of age suffering from cicatricial bands between the cervix and the vagina. Such adhesions are not seen so frequently in younger women, more gentleness being now employed in obstetric practice than formerly; or, perhaps, it may be that in the old days the head was left much longer pressing on the cervix and vagina, causing destruction of tissue. Pozzi in his new work on Gynaecology devotes several pages to these bands. They may interfere with labour so much in some cases, that it is considered necessary to induce premature delivery.

Anomalous Cases of Diphtheria.—Dr. H. S. BIRKETT read a paper on this subject, which appears on page 889, and Dr. JOHNSTON related the results of the bacteriological examination, page 892.

DISCUSSION.

Dr. PROUDFOOT said that he has often had cases where it was difficult to decide whether or not the disease was diphtheria. He had a case in his practice very similar to Dr. Birkett's. A boy ten years of age was treated for a purulent inflammation of the ear following measles; a membrane formed in the nose and was removed, but was not followed by any other. It only occurred on one side. The child did not complain of any unusual symptoms, except the general malaise following measles, from which he was recovering very well.

Dr. McCONNELL said that these cases form another instance illustrating the great advantage of the bacteriological methods of diagnosis. He urged the surgeons to bear in mind the utility of serum, and to save it for bacteriological investigation. In many cases we have no other means of diagnosis.

In the present cases he thought that if Dr. Birkett had seen them a little earlier he might have observed some slight elevation of temperature. He had seen such cases—little fever the first day, and the next day the fever is completely down. It seems rather odd to have the diphtheria bacilli growing, without at least producing some poison.

Dr. MAJOR thought that anomaly was the rule in diphtheria; at all events, you cannot lay down any hard and fast rules as to its course, local and constitutional. Secondary nasal diphtheria is one of the most fatal forms; primary nasal diphtheria, on the other hand, is not only mildly contagious, but the septic influence is almost altogether wanting. When primary it confines itself principally to the nasal passages, seldom extending into the naso-pharynx, still more rarely into the larynx, and glandular enlargement is the exception. In most cases the membrane is confined to one side of the nose exclusively, reforming as fast as it could be developed after removal, the health of the parts influencing its renewal. He cited the case of a child from whom he had previously removed a tonsil, the cicatricial tissue was free from exudation, while every place around it was covered. It would seem that the degree, or an excess, of the blood supply in the part largely regulated the region where the membrane may develop, and also the development of the disease in the individual. In regard to the Klebs-Löffler bacillus, the clinicians should not throw themselves into the arms of the bacteriologists. Who is going to correct the bacteriologists, for all know how liable they are to be mistaken at times? He thought that it would be a great mistake to neglect good classical symptoms in favour of any theory that might be arrived at by a bacteriological examination.

Dr. FOLEY asked whether erythematous rashes were common in diphtheria. He had heard of such a case the other day, where a profuse desquamation of the neck followed diphtheria.

Dr. MILLS thought that the most important conclusion from Dr. Johnson's researches is to confirm the views held as to the infection of diphtheria. The poison apparently must have been formed but not absorbed. It seems that the difference in the resisting powers of certain individuals to infectious disease

does not lie altogether in the serum. Pathologists will have to abandon the narrow ground of the serum alone and take in the tissue fluids in general. The life of the cell is expressed in its fluids. That is what I think this immunity question is going to work out to, to a certainty. The question of absorption is very interesting. The scars referred to are especially interesting. I think the disease did not attack these parts, not on account of their lack of vascularity, but on account of their deficient absorptive power.

Dr. DeCOW did not think minutiae in diagnosis of much importance to the general practitioner, the important thing being to adopt isolation and get at your treatment at once.

Dr. BISKETT, in answer to Dr. Foley, said that the occurrence of rashes in diphtheria, especially in the more malignant forms, is well recognised. In both of these cases the membrane was not limited to one nostril, it invaded both nostrils. They differed in this, that in one case the membrane recurred on removal, in the other it did not. In regard to the remark of Dr. DeCOW, he said that these cases were treated as diphtheria before the report of the bacteriologist had been received.

Dr. MAJOR referred to a case reported by him some four years ago. He at first regarded it as a chronic membranous nasal catarrh. The young lady suffered from complete obstruction of both sides of the nose, but rhinoscopic examination showed that it did not at all enter into the posterior nares; there was no constitutional disturbance, no enlargement of glands; she had not been exposed to contagion so far as known, no case being in the neighbourhood. She was living at the time in the Young Womens' Christian Association, where there were twenty or thirty other people in the house. At that time the knowledge of the condition was very vague and the examination did not yield any result. It was treated as a membranous nasal catarrh, and after trying various measures he found that the galvanic cautery was the only means that yielded any ready result. The treatment was carried out persistently daily for probably a couple of months. The case was reported to the Society, and before the paper was read a young lady occupying the same room as this patient was ill, had been attended and prescribed for as a case of tonsillitis.

In consultation he afterwards recognised it as a case of diphtheria, a bad form, with nasal and pharyngeal extension. Since then he has had no doubt in his mind that the case of chronic nasal catarrh was nothing more nor less than a case of chronic diphtheria, and that the second case was contracted from it. With regard to the erythema that a gentleman spoke of a moment ago, cases of that kind are sometimes apt to be confounded with scarlatina. He had had a case some time ago which he pronounced diphtheria after an inspection of the throat. A few days afterwards a scarlet rash developed, but two weeks later, general paralysis setting in, confirmed the diagnosis.

Report on Three Prostatic Tumours—Dr. ARMSTRONG exhibited three specimens of hypertrophied prostate which he had removed last summer, and read Dr. Adami's report on the microscopical examination (appeared in MONTREAL MEDICAL JOURNAL, March, page 647).

Dr. Armstrong continuing said that clinically these cases are very interesting. They occur as a group of cases for which at present the relief is not very satisfactory. From an operative point of view they are bad patients. They often come to us in such a condition of toxæmia, with advanced kidney disease and dilated genito-urinary tracts, that they are not able to resist the shock or hemorrhage. In the future it is believed that much better results will be obtained than at present.

Dr. JOHNSON wanted to know what was the rational explanation as to why the prostate enlarges. There is no special irritation, no apparent local causes, and what is remarkable it enlarges at a time when it is least used. We have all heard of atrophy from disuse, but hypertrophy from disuse seems to be implied in the case of enlarged prostate.

Dr. SMITH always takes an interest in the prostate gland, because he constantly thinks of the resemblance between it and the uterus. The structure of both organs is composed mainly of fibrous and muscular tissue. The uterus also contracts under the same conditions which cause contractions of the prostate. It seemed to him that from Prof. Adami's description of the gland one can easily see why people get enlargement of the prostate, and even why they get it when

they don't want it any more. Overuse of this muscular and fibrous tissue will cause hypertrophy. Every time the fibres of the prostate contract they increase in size, and when this has been going on for twenty or thirty years, they get to be a pretty good size. Fibrous tissue frequently occurs in the uterus as the result of an exudation from the walls of the uterine veins, due to some obstruction to the venous circulation in some of the large veins about the brim of the pelvis, and into which the uterine veins empty. When we have chronic constipation, with a loaded sigmoid flexure pressing directly on the common iliac veins as they pass over the brim of the pelvis, we have engorgement of all the subsidiary veins, an exudation of lymph, and the organization of the lymph into fibrous tissue. Obstruction to the venous circulation is the key-note to the causation of enlarged prostate; this obstruction may be due to chronic constipation, to the heart, or to the liver. For the last few years he has employed the fluid extract of ergot in the treatment of enlarged prostate, for the very reason that he has seen such good effects from this drug in the treatment of subinvolution, and he found it generally gave great relief. In one case a soft bougie could not be passed; after a few doses of this remedy the man could pass a good stream. In the stage when the enlargement is forming we are to keep the following points in view: Don't excite the gland too often; remove any obstruction to the venous circulation, and give ergot to cause the already hypertrophied muscle to contract.

Dr. McGANNON believed that enlarged prostate is more often due to overloaded blood vessels than to overuse, and thought that such cases can be much benefited by proper treatment, even when the genito-urinary tract is involved.

Dr. MILLS would not say anything on the subject but for the alarming views of Dr. Smith. He called attention to a kindred phenomena which may throw some light upon the subject. Bitches as they grow old are very liable to develop adenomatous tumours in the region of the mammary glands. Dr. Lafleur examined some of these and pronounced them adenomata, tending to be malignant. Dr. Adami is of the same opinion. Here, then, you have an overgrowth of the same kind of tissue with a tendency to become pathological,

even malignant; both connected with the period of life when vitality is lowered. He was not prepared to pronounce a definite opinion, but he most emphatically repudiated Dr. Smith's ideas on the subject of the etiology of hypertrophied prostate.

The late Dr. R. Hugh Berwick—Dr. MILLS said: "I have a motion to make, and with the rest of you I regret that we have so often to make these motions. In the last few years they have come with painful frequency. I will therefore move, and Dr. Proudfoot will second, the following resolutions:

"*Resolved*—That this Society has heard with deep regret of the death of one of its members, Dr. Robert Hugh Berwick, who, though a young member of the profession, was one of the most promising, and one who had gained the respect of all with whom he had come in contact during his brief but successful career.

"*Resolved*—That a copy of this resolution be sent to the friends of the deceased, to the Dental Association of the Province of Quebec, and to the Press."

Stated Meeting, February 3rd, 1893.

JAMES STEWART, M. D., PRESIDENT, IN THE CHAIR.

A. W. HALDIMAND, M. D., was elected a member.

Malignant Growth of Prostate and Base of Bladder.—Dr. ADAMI brought this case before the Society on account of the numerous points of interest that it presented, more especially on account of the long continued history of kidney and bladder disturbance, and the nature of this disturbance. Dr. Bell, in whose ward the patient was at the time of death, would furnish details of the history of the case. He would simply remark that the patient, T. R., aged 88 years, entered the General Hospital in June, 1892, complaining of renal symptoms, and was in consequence placed under the late Dr. Ross. Soon vesical disturbance became more prominent and he was transferred to the surgical wards. Here malignant tumour of the bladder was diagnosed: there was progressive emaciation ending in death upon January 20th, 1893.

Dr. ADAMI detailed the post mortem appearances. Leaving aside the condition of the urinary system, there were briefly senile degeneration of the various organs, hydrothorax and odema of the lungs. He exhibited the kidneys which were large. The left kidney weighed 180 grms., and presented an obstructive cyst occupying the lower extremity of the organ. On section both cortex and medulla were found to be narrowed and of pale colour. The right kidney was larger and more hydronephrotic, but was not weighed or cut into, since it was reserved attached to the ureter and bladder for museum purposes. The pelves were greatly distended, as were also the ureters along their entire course until the base of the bladder was reached, where they entered into a mass of new growth. The bladder was distended, its apex reaching to the level of a line joining the anterior superior iliac spines. It contained more than 350 c. c. of bloody urine, together with masses of blood clot. On the other hand, the pelves of the kidneys and the ureters were filled with clear, almost colourless urine. Upon emptying the bladder the source of the hemorrhage was made evident. From the base there projected into the cavity a large nodulated and very vascular growth, divisible into three irregular masses, of which the most prominent was in the median area and somewhat anterior. The organ was firmly impacted into the pelvis, the new growth implicating also the prostate and the tissues around the base of the bladder. The glands of the left inguinal region were enlarged and the seat of a growth which felt firm on section. Similar secondary growths affected the retroperitoneal glands, and along the course of the right common iliac artery, near to its origin from the aorta, were two enlarged glands of the same nature.

Microscopical examination of this new growth yielded results of not a little interest. Portions removed from the masses projecting into the bladder presented an appearance which could not be distinguished from what is usually recognised as a form of alveolar sarcoma; that is to say, that with the low power nothing could be seen but a collection of round or slight oval cells of fair size, and towards the surface of the growth these could be seen to be infiltrating the muscle fibres of the bladder wall, or what remained of them.

With a higher power these cells could be seen to possess an alveolar arrangement. A peculiarly delicate stroma surrounded masses of these cells, forming a series of rounded alveoli, and in this surrounding stroma ran fine vessels of an embryonic type. Where the tissue of the sections had not been loosened in the process of preparation this arrangement was in parts unrecognisable—the growth was undistinguishable from a true sarcoma.

A study of the prostatic portion of the growth and of intermediate areas revealed the true nature of the growth. In the anterior region of the prostate there was still present remains of the prostatic tissue. The tubules and their surrounding tissues could be seen presenting a typical arrangement, but with this some dilatation of the lumina and hypertrophy of the stroma. Sections which showed these showed, however, other gland follicles which were becoming enlarged, and the epithelium here was undergoing proliferation, so as completely to occlude the lumen. The next stage to be made out consisted of what seemed to be these modified masses of glandular epithelium giving off finger-like collections of cells extending into the spaces of the surrounding tissue, and a little further back the condition of the modified prostate was that of a typical scirrhus cancer. Passing now towards the base of the bladder the cell masses become larger, the individual cells less compressed, the intervening fibrous stroma more and more scanty, and thus the passage could be made out from the scirrhus condition through that of medullary cancer to the first described condition which, as has been stated, would undoubtedly, without further study, be taken by most observers for an excellent example of one form of alveolar sarcoma. The alveolar sarcomata form so unsatisfactory a group of neoplasms, the descriptions of the various forms given by different writers are so divergent that it is worth while to record this case, showing as it does the necessity of a careful study of all portions of a growth presenting the appearance of what might reasonably be considered the true alveolar sarcoma of some authorities.

This difference in the appearance of the various parts of the tumour harmonises well with the clinical history of the case. Evidently the disease started in the prostate, and here it had

been of very slow growth. The firm fibrous nature of the neoplasm points to this, and it is of special interest to note that, according to the patient's statement, the enlarged glands in the left inguinal region had been present and noticed by him for quite two years. There was a history of prostatic disturbance for some considerable period anterior to this, and the interesting question is raised as to whether the carcinomatous condition had been preceded by hypertrophy of the organ. This question, it is true, cannot be answered with certainty. It might be considered that the enlargement of the follicles in the anterior region of the organ that had not as yet undergone atypical epithelial proliferation, and the increase of stroma here is an indication that this had been the case; but the point will not bear having any great stress laid upon it. Evidently also, from its appearance, the vesical portion of the growth was of rapid development, the marked want of fibrous inter-alveolar substance points to this, and here again we have the history of relatively recent vesical symptoms. It would seem as though the neoplasm had extended under the base of the bladder (externally), and so brought about obstruction of the ureters before the wall of the viscus itself had been invaded. The firmer nature of the growth in the former region is in support of this opinion.

The fact that the inguinal glands of the left side were implicated is worthy of note, not only, as has been stated, because of the early period at which they were affected, but also because their implication would seem to indicate a back flow of lymph. This, however, is in consonance with numerous other observations tending to show that lymph may flow in either direction, or to place the matter otherwise, that when one channel becomes obstructed a collateral if round-about channel is employed.

Dr. BELL had little to add to the clinical history of the case given by Dr. Adami. There could in this case be little difficulty of diagnosis when he saw the patient. From the extensive nature of the disease in the bladder, from the secondary deposits in the glands, from the man's advanced age and approaching death from senility, this was not at all a case for operation, and having satisfied his mind upon that point he simply waited, knowing that it would not be long before the

specimens would be passing through Dr. Adami's hands. With regard to the history of the progress of the disease, having only once investigated the case he could not be very clear, but this he could affirm, that the patient had manifested symptoms referable to the prostate for five years, but had only been seriously ill for a twelve-month. The growth in the groin had been present for two years.

Dr. SMITH was under the impression that the lymph always flowed from the urethra towards the inguinal glands; he was certain such was the case so far as the penile and membranous portions of the urethra were concerned, and thought it applied to the prostate portions as well.

Dr. ADAMI pointed out, in reply to Dr. Smith, that here was not so much a question of the urethra and its lymph supply as of the prostate. He thought that it was generally held that the lymph about the neck of the bladder passed to the retroperitoneal glands. Here the prostate would seem to have been primarily affected; its lymphatics pass to a gland in the lateral true ligament of the bladder.

A Case of Occipital Meningocele—Dr. KENNETH CAMERON read the report of this case, which appears on page 896.

Treatment of Alcoholism by Hypodermic Injections of Nitrate of Strychnia—Dr. McCONNELL read a paper on this subject as follows:—

In *Merck's Bulletin* for August, 1891, a brief notice of Dr. Portugalow's experience with the nitrate of strychnine in Dipomania is given. He claimed to have cured 455 cases, and asserts that he knows of reliable and specific remedies for two affections only: strychnine for the various forms of alcoholism, and quinine for malarial fever. He used a solution of six centigrammes in fifteen grammes of distilled water, giving from one-quarter to one-half gramme hypodermically once or twice daily, ten to sixteen injections completing the treatment. Similar results were obtained by Dr. W. N. Jergolski, and others, in Russia, Germany and Italy.

That strychnine, cocaine, atropine, capsicum, cinchona, and other nerve tonics had been employed with advantage in alcoholism is a fact generally known, but that such brilliant results

could be obtained by such a well-known remedy as strychnine, properly administered, filled a gap in the therapeutics of a disease with which, hitherto, medication had mostly been fruitless, and which could only be regarded and hailed with grateful appreciation by the general practitioner who could hitherto do so little for this,—by no means small,—class of afflicted humanity.

I have treated during the last 15 months some 30 cases, 25 of whom received the full course of injections; the results will, I think, demonstrate what benefit we can obtain from it in this form of narcomania. Due attention was paid in each case to the associated derangements and the constitutional peculiarities. The patients all came to the office for treatment, and although recommended to abstain from further drinking were allowed to take liquor if they desired it. The dose given subcutaneously varied from one-thirtieth to one-sixth grain twice daily for ten days, then once daily for ten days, the highest dose being reached about the third or fourth day and continued to the close of the treatment. This being nearly in accordance with Spitzka's experiments, that to maintain its action the doses of strychnine must be in the beginning increased, and later the interval increased and the doses lessened. The border line of tolerance was reached in most cases when one gramme was used of a solution containing 12 centigrammes strychn. nitrat. to 15 grammes water, that is about two-fifteenth grain. Internally cinchona, peroxide hydrogen and capsicum were frequently prescribed in combination. When bromide of sodium failed to procure sleep, paraldehyde always succeeded. In the later cases strychnine in doses of one-twentieth grain, with elixir of phosphate and calisaya (Wyeth's) was ordered to be taken once or twice daily for four or five weeks after ceasing the injections.

The following brief reports of each case are condensed from the notes taken in detail during the progress of the treatment.

Two solutions were used, one containing six centigrammes to fifteen grammes water and in the later cases one of double the strength, equal to two grs. to the half ounce. The weaker solu-

tion was used in all cases unless where the stronger is mentioned.

CASE I.—November 10, 1891, insurance agent aged 50, has used alcohol since 12 years of age and to great excess since 20, and more or less continually during the last four years; marked family history of alcoholism. Patient is small in stature, emaciated, tongue thickly coated, tremulous, has had very little sleep for a week. Gave a purgative and potassium bromide.

On the 11th began the injections, giving $\frac{1}{2}$ gm. twice daily. He states that after a prolonged spree, during the first, second and third weeks of abstinence he suffers from cramps in the limbs, and for four years has had night sweats; had no cramps after first injection and claimed to have no desire for liquor after the first day. At the end of the first week of treatment he showed remarkable improvement in every respect; had a ravenous appetite, slept well, no depression, and very sanguine as to the virtue of the treatment. During the second week had one injection daily, when the treatment ceased. He then claimed to enjoy as good health as ever before. He reported from time to time the entire freedom from desire for liquor, and remained so for eleven months, during which time he had no regular work. Having got a situation, after his first pay he ventured a glass of liquor, when the ardent crave was rekindled and a prolonged debauch followed.

CASE II.—Moulder, aged 50, is a strong, robust man. No family history of alcoholism or other neurosis. Received a blow on the forehead about 30 years ago, where a depression still exists; began his drinking habits after that; has drunk hard during last 15 months and is now imbibing all he can procure, sometimes 40 glasses of liquor daily. Had two injections twice daily for a week; took no liquor after the first day, and after the second day claimed to have no desire for liquor. He became ill with la grippe, having received 10 injections. I heard from him four or five months after and learned that he had not up to that time partaken further of spirituous drinks.

CASE III.—Insurance agent, aged 46; has a neurotic family history, there being cases of alcoholism and insanity. Has drunk

steadily for 30 years. I requested this patient to drink all he wished during the treatment. He was poorly nourished, not having the means to properly maintain himself owing to his habits. Drank 20 glasses of ale first day of treatment, the number diminishing daily until the end of the first week, when his desire ceased. At the end of second week he appeared free from the drink crave and had improved very much in his physical condition. At the end of two months he again resumed his drinking habit; his relapse was attributed to his unwillingness to give up his life-long habit of ale at meals.

CASE IV.—Advocate, aged 40; has drunk inordinately for about 10 years; no hereditary cause; attributed the acquirement of the habit to the treating custom. Suffers from gastritis with morning vomiting and sleeplessness; gave sod. brom. and calumbo and parvules *ing. subchlor.* 1-20 gr. every hour. Gave first injection December 17th; found a tonic effect after first injection; no vomiting after next morning; took liquor daily until 25th; none after, all the catarrhal symptoms disappeared after the first week of treatment and also the desire for liquor. Ceased the treatment on January 1st, patient feeling quite restored. In a couple of months he had relapsed into his old condition.

December 26, '92, came to have another course of treatment, having confidence in its power to relieve him of his desire for alcohol. The gastric symptoms were predominant; the strong solution was used, beginning with 5 degms. and increasing daily until 10 was reached; gave two injections daily for 10 days and one daily for 10 days longer. After fourth day gastric symptoms were quite relieved and desire for drink gone; attempted a glass of wine a day or two after but found it flat and distasteful. While taking two full doses daily, on two occasions noticed for a few minutes involuntary contraction of upper limbs; since end of first week appetite and digestion have been good, and he claims to feel better physically and mentally than for months. He, however, will not consent to total abstinence for the future, which to those who can only drink immoderately is the only remedy.

CASE V.—Printer aged 40 ; single ; a drunkard for about 20 years ; no hereditary predisposition ; accustomed to be off work two and three days each week ; began treatment December 30th, 1891 ; the ordinary solution ; had no desire for alcohol after first injection, recovering in a week his accustomed health. On inquiry I find he remained well for eleven months when he again resumed his drinking habits.

CASE VI.—Painter, aged 50 ; has drunk spirituous liquors since 18 years of age ; father was a hard drinker ; he cannot sleep and has no appetite ; constipated ; tongue coated, smooth at tip and edges ; has an intense crave for alcohol ; drank a few hours before beginning treatment ; took no alcohol after first injection ; was at a dinner party four days after where liquor was used, but had no desire for it and took none. After 15 injections was discharged much improved in general health and changed in his appearance.

CASE VII.—Corset maker, aged 32 ; has used liquor for 15 years and excessively for 10 years ; went on protracted sprees at irregular intervals ; treatment continued from July 5th to 20th, 1892 ; was drinking when the first injection was given ; no desire for liquor after second day, and steady progress afterwards towards his usual condition of health in the intervals of sobriety ; four months after again resumed the habit.

CASE VIII.—Feb'y 9th, 1892, Druggist, aged 29 ; used alcohol since 9 years of age ; had not taken any for two years previous to three months ago ; had made many attempts to give up the habit but without success ; no heredity ; no insanity or nervous disease in family. Desire for liquor left after second day ; stated that he had not experienced any of the symptoms of nervousness and depression observed at other times when breaking off ; at the end of the two weeks treatment was in good condition and no desire for stimulants. Some two months after learned that he had relapsed.

CASE IX.—Auctioneer, aged 42 ; has drunk intoxicants for about 30 years, during last 6 years almost constantly ; was irregular in his attendance and got about 20 injections ; began drinking immediately after.

CASE X.—Waiter, aged 55, July 15th, has used liquor since he was 20 years of age; father drank; has abstained at intervals of 2, 3, 6 and 11 years. The last six years' abstinence ended a year ago, when brandy was recommended for sleeplessness, since then has drunk more or less constantly; was intoxicated when he got the first injection, July 15th, 1892; much gastric derangement and sleepless. Sod. Brom. used to procure sleep; had no desire after the first day and has not drunk any since.

CASE XI.—Aged 40, Feby. 25, 1892, no occupation; interdicted for some six years, a chronic inebriate with inherited predisposition. When first injection was given was in a stupor and semi-paralysed; had been drinking very hard for two weeks and had for the last week taken 60 grs. sulphonal at bed-time, furnished to him on his own application by a druggist. At the end of two weeks had improved very much and for a week had not asked for stimulants. He then went out for a drive, and passing a saloon to which he was accustomed to go could not resist the temptation to enter. He was then placed in a private ward in hospital and the injections given for three weeks. After the fourth day did not ask for liquor and at the termination of the treatment had quite recovered himself and left, stating that he had no desire for alcohol and that he would not again touch it; three days after he had broken his resolution.

CASE XII.—Gardener, aged 33; Feb'y 23; has taken liquor since the age of 15; father drank. Patient gets intoxicated every pay night (Saturday) and would return to work Tuesday. He drank soon after the first injection; had two weeks treatment, one injection daily. He remained a total abstainer for five months. Reported himself again for treatment on December 9, 1892; had gone on a visit to the United States and while in company was induced to take a glass of beer, and for last four months has drunk more or less constantly and has been drunk daily for the last four weeks. Put ant. tart. into his accustomed liquor and advised him to use it for a day or two. While under the treatment it caused considerable nausea and vomiting; used the stronger solution twice daily for ten days

and once daily for ten days longer ; was free from the craving after the first day ; took the tonic for five weeks, two days after it was finished began drinking again.

CASE XIII.—March 1st, 1893. Widow, aged 44, has used liquor for 20 years, inordinately for four years ; suffers from chronic gastritis, pains in the hands and feet. At the end of first week inclination for her usual stimulant had left and her gastric symptoms had much improved. During the first week of treatment she avoided passing the saloon which furnished her with whiskey, fearing that she would not have the courage to do so without calling. After the first week she passed it daily and was quite free from desire for alcohol ; remained all right for six months.

CASE XIV.—March 5th, 1893. Commercial traveller, aged 37, single ; has been an alcoholic for 17 years ; father drank. Took rye during first five days of treatment, but states that its effect is different to what it usually is, its effect being scarcely noticeable ; he thinks that under the influence of the injection one can take larger quantities of alcohol without its having the ordinary effects ; increased his injection to 1-20 gr. ; after fourth day had no desire for his accustomed rye. On the thirteenth received some unpleasant news and tried to assuage his feelings with rye, but it was not gratifying and he took no more ; remained all right one month only.

CASE XV.—March 9th, 1893. Civil engineer, aged 42, has used liquor for 21 years ; father drank. One gm. doses given ; lost all desire after fourth day ; three months after had resumed his drinking habits.

CASE XVI.—March 27th, 1893. Butcher, aged 26, an inebriate for eight years ; father uses liquor, but not to excess ; one brother a hard drinker. Gave 30.1 gm. injection ; lost desire for alcohol after fourth day and has remained an abstainer to this date.

CASE XVII.—March 28th. Telegraph operator, aged 40, a drinker for 25 years ; no hereditary predisposition ; sleeplessness and gastric derangement. Took no liquor after first injection ; made a satisfactory recovery ; relapsed four months after.

CASE XVIII.—April 5th. Broker, aged 47, has used liquor for 47 years, latterly is constantly under its influence; marked nasal acne; much gastric distress. Combined 1-120 grain atropine with the strychnine once daily; had three weeks' treatment; took liquor daily until end of first week, after that had no desire whatever. Stated at his last injection that he did not wish to give up the habit of using wine at dinner; he was advised of the danger of not doing so. Some two months after he was as bad as ever.

CASE XIX.—July-11th. Commercial traveller, aged 41, single, no inherited tendencies; has used liquor since 18 years of age; now goes on prolonged sprees; has gastric catarrh; gave internally peroxide of hydrogen, tr. cinchonæ co. and tr. capsici. Used no liquor after first injection. Gave him a mixture to take for a month after his treatment, containing strychnine nitrate in elixir of the phosphates with calisaya (Wyeth's). January 12th, six months after, reported having been a total abstainer ever since, although daily in places where liquor is retailed.

CASE XX.—September 8th. Manager boot and shoe factory, aged 60; used alcohol first at 20 years of age. At 27 used it excessively; goes on prolonged sprees three or four times a year: has now been drinking four weeks; no hereditary tendency; patient is much debilitated; no appetite and cannot sleep; paraldehyde gave sleep; no desire for liquor after fourth injection, when he returned to his work and has remained well to date.

CASE XXI.—October 3rd. Clerk, aged 37; has used liquor for 11 years; no hereditary predisposition; uses mostly whisky; sleepless; paraldehyde gave sleep; got 30 injections; no desire for liquor after two or three days. At the end of his treatment was feeling unusually well. He has remained at business and has not taken any liquor since.

CASE XXII.—October 3rd. Agent, aged 59; has used liquor since a boy, and up to 55 years of age could get drunk every night and be up at work the next day, since then has

been a confirmed inebriate; both parents were very intemperate. The injections within two days had improved the condition of his stomach and lessened the desire for alcohol. He continued his beer during the first week—a glass or two at bedtime. A couple of days before the treatment was completed he left the city for two days, and at a gathering of friends indulged very freely.

CASE XXIII.—Traveller, aged 40; had a sunstroke in 1880; no hereditary influences. Although he took a glass of ale occasionally it was not until after the sunstroke that he began to indulge freely; has now been drinking steadily for four weeks; he was sleepless and on the verge of delirium tremens; secured sleep readily with paraldehyde and sod. brom.; began with 7 dgms. of the stronger solution, increasing it up to 10; 30 injections; drank none after first day, and made a rapid recovery, resuming work within a week.

CASE XXIV.—November 26th, 1892. Carpenter, aged 34; began to drink seven years ago. Takes two or three days continuous drinking spells at irregular intervals; last one continued a week; not inherited; sleepless and no appetite; three doses paraldehyde gave sleep; gave 30 injections, beginning with 7 dgms. strong solution, 10 after third or fourth day; took no liquor after first injection; went to work on the second day and made a rapid recovery to his normal condition, and remained well to date; took the tonic for one month.

CASE XXV.—December 8th, 1892. Broker, aged 30; has used alcohol for about eight years; excessively for six years; no heredity; much gastric derangement; gave a purgative of powdered rhubarb and calomel and sodium bromide peroxide hydrogen trs. calumba and capsicum internally; required paraldehyde to get sleep; blood examined; there were 4,400,000 corpuscles to the cubic millimetre, about 7-10ths of these were very irregular in shape, shrunken with jagged edges, some of the projections acute, others truncated; no craving for alcohol after 3rd day of treatment; 30 injections, all 10 dgms. after 3rd day. Although mingling with his old associates daily in places where liquor was sold, felt no desire whatever

for it ; appetite was good and he appeared fully restored to his usual health.

From the results obtained in these twenty-five cases we can learn that simultaneously with the use of this remedy the crave for alcohol in inebriates diminishes and in a few days is completely gone, and through the withdrawal of the poisonous beverages and the tonic effects of the strychnine there is a more or less rapid restoration to sound physical health and of the mental powers ; but as most of those treated have relapsed within from one to eleven months, the inhibiting power of the remedy is not permanent, and while it temporarily relieves the distressing and overwhelming crave for more stimulant and promotes a return to normal health and in which condition these patients may continue to remain, yet they still lack the necessary will power to enable them to avoid the dangers which they know will precipitate a return to their previous enslaved and degraded condition. So that while it is fully within the power of medical science to restore these patients to temporary health, strychnine does not—as doubtless no drug treatment ever will—prevent the possibility of further relapses, although we can always depend on it to arrest what would be a prolonged debauch if its aid is early resorted to.

That weakened will power is a result of the prolonged use of alcohol is generally conceded, as is the fact that the tendency to alcoholism is in a large percentage of cases inherited, and that it is often as dipsomania one of the manifestations of insanity. A definite series of pathological conditions follow the continual indulgence in alcohol, differing only in degree in the milder methyl to the powerful effect of amyl alcohol, the nervous system showing the earliest and most marked disturbance, although every organ and tissue in the body eventually suffers. These and many other facts have led neurologists to place alcoholism as a distinct disease among the neuroses.

This position implies a complete revolution in the methods of treating these cases, and has brought to the aid of philanthropists and moralists the assistance of the medical profession, upon whom now devolves the duty of further elucidating the true

pathology of the disease and indicating the best means of restoring this numerous class of patients to a normal condition.

That the urgent demand for relief from the evils of intemperance is being recognized by the profession is evidenced by the increased interest taken in the work of the American Association for the Study and Cure of Inebriety, and in the section for the study of inebriety of the British Medical Association, and an ever increasing number of scientific investigators throughout the world.

Before rational and effective measures can be adopted for the proper management of inebriety we must have correct opinions in regard to the physiological actions of alcohol and the pathology of the disease, otherwise we must trust to the empirical results of experience.

The decomposition of alcohol which takes place in the economy, is not yet known. It has been generally accepted that from 1 to 2 oz. can be oxidized in the system, giving heat and force to the extent of the oxygen used, but the tissue changes are lessened as evidenced by the diminished excretion of urea, and CO_2 , and to the degree that they have been robbed of O by the systemic digestion of the alcohol; from this fact has sprung the idea that it conserves the energies and lessens waste, and on this assumption it is frequently prescribed as a sustaining remedy; but a view which would appear to be nearer the truth of the matter, is that which denies that alcohol is a food in any sense, but being a ptomaine, a result of decomposition, it is like them generally, a poison in all its actions. That it is not oxidized in the system, but that it combines with the hæmoglobin and destroys its functions of absorbing O, the diminished urea and CO_2 being in this way accounted for. Other observers have demonstrated that the leucocytes have their vitality lessened by the continued use of alcohol, and in harmony with our recent views on phagocytosis this fact would explain the greater susceptibility of drunkards to the action of pathogenic bacteria, and their lessened resisting power in throwing off disease, although Mortimer Granville maintains an opposite view on this point, and claims for alcohol drinkers a greater immunity than

abstainers. That the red corpuscles are profoundly altered was observed in the last case I reported, the only one in which the blood was examined. We have here the evidence of a veritable poikilocytosis in a subject where neither aglobulism nor achromatosis existed. Most of the effects of alcohol are apparently explained by its paralyzing effect on the vaso-motor system, from the first contact; we have also the slight stimulating effects on the heart of small doses, and its local and reflex irritant action on the alimentary tract, which results in increased buccal and gastric secretion, thus favouring digestion. But even this advantage is not upheld by the recent experiments of Blumenau, who found that the total action was impairment of digestion, and when we take the fact that even the stimulating effects are quickly changed into paralytic conditions, and when often repeated leading to exhaustion of every function and more or less general degenerative changes throughout the body, we can readily understand how we are to get beneficial effects from drugs having the action of strychnine.

The chief action of alcohol, then, is to paralyze the vaso-motor system, dilating the arterioles. Strychnine, besides exalting the excitability of the spinal cord and probably the motor centres in the brain, stimulates the vaso-motor centres, contracting the arterioles, as well as being one of the most efficient heart tonics, through its stimulating effects on the cardiac ganglia.

While we have in strychnine a true antagonist to the action of alcohol, and one that will counteract its effects, the inebriate still requires aid which can scarcely be expected of drugs. He needs the mental and will power to overcome his acquired or inherited tendency to resort to narcotics. This must come from treatment which seeks first to restore all the abnormal conditions of the patient, whether due to alcohol or otherwise. Then strict abstinence, in which must be aided by moral suasion, the diversion of continual employment, and the education of the mental and moral faculties to a higher status; even the influence of hypnotic suggestion may be applied in suitable cases, as has been done recently with a fair measure of success. And

when these means fail, then institutions where voluntary or forced detention can be secured and where all the present known means can be most successfully applied, must be the only hope of restoring these unfortunate subjects of narcomania.

DISCUSSION.

Dr. GORDON CAMPBELL said that it is claimed that by the hypodermic administration of certain drugs you get an effect not obtained when absorbed by the stomach. Of these drugs strychnia is one of the best examples, and by giving it hypodermically and rapidly increasing the dose it is believed you get the full momentum of the drug, an effect not otherwise obtainable.

Dr. SMITH did not believe in a tendency to alcoholism being inherited.

Dr. GUERIN said that he had had some experience in the treatment of alcoholics, but has never yet used strychnia. If there is any good to be derived it is simply by means of suggestion: we should make patients understand the injury they are doing to themselves. He generally gives them some mild sedative, some hypnotic; and further than that, stops the stimulant, and as a general rule gets very good results. From what he had heard of the paper, no exceptionally good results have been claimed for strychnia, as the majority of the cases relapsed within a few months. He was glad to see this question ventilated, as it is a subject much spoken of lately, and to learn through Dr. McConnell's paper that after all there is not much to be expected from it. The apparent good results are due largely to the moral influence of the introduction of the needle and the impression which the patient receives that a very powerful remedy is being employed in his behalf and that consequently the results must be very great.

Dr. GEO. T. ROSS did not think that the hypodermic administration of strychnia had any peculiar action in the case of chronic alcoholism. Its use is indicated in all cases of gastritis or other affections where the stomach will not retain anything. Vomiting is a common feature in these alcoholics, and the increased effect of the drug when administered hypodermically may be due not to any special power in the drug itself, but rather that it is better absorbed in that way. He has

used hypodermics of strychnia in the vomiting of pregnancy, and in cases of gastritis due to causes other than alcohol, and with, in every case, satisfactory results.

Dr. PROUDFOOT thought that Dr. McConnell's paper clearly shows that in strychnia we have a drug which will destroy the appetite for alcohol; and even if only for a few weeks it is hence a great boon. There are many cases where men have been incapacitated for days and months at a time by this habit, and if we know that the nitrate of strychnia will remove or destroy the taste for whiskey and break up an attack of this kind, it is a very valuable piece of knowledge, and something that it would be very well for every doctor to become practically acquainted with.

Dr. ANGLIN said that inebriates were not received in the asylum unless they can be proved insane; he thought this a pity, as in his opinion the best treatment of all for the inebriate is to put him in some home where he is removed from the contact or possibility of drink.

Dr. STEWART has had no experience in the treatment of alcoholism by strychnia. Of course if the latter has such a power it might be readily proven; half a dozen medical men could, in the course of their practice, confirm or refute these claims in a week. He questioned very much whether any drug has that power. Two or three years ago there was a great deal of talk made in connection with hypnotism, but so far as he can read on the subject, hypnotism is practically useless in this respect. In fact, until general moral measures are more advanced there is very little to hope for from any kind of treatment.

Dr. REED thought it is bad that the idea should become popular that the craving for liquor was a disease instead of a vice.

Dr. McCONNELL said, in answer to Dr. Guerin's remarks as to getting equally good results by the administration of tonics by the stomach, the quantities administered could only simply exercise a local tonic action on the stomach. Again, we have to distinguish between a sort of mania for alcohol and the effects of alcohol on the system. Most of the vaunted cures we hear of claim to cure alcoholism out and out; now, we can never expect such an effect from any drug. To transform the de-

sires of an individual so completely as to cure him for all time from a distinct neurosis is something that it is hardly reasonable to expect from the administration of a dose of medicine. By using the drug hypodermically you get the action more purely. It is a well known fact that the liver is the great disinfecting organ of the body, and were it not for its destructive powers on the ptomaines we could not live. Just as it does this, all agents administered by the stomach are diminished in their physiological powers, so that by giving them hypodermically we get nearly double the action and very much better results.

From the results of his cases we may conclude that the strychnine simply restores the original condition; when the desire relapses a few more doses will cause it to disappear in the course of a few days. Take a man who is practically useless to his family, if you can destroy the appetite for even three weeks, is it not a decided advantage?

In regard to what Dr. Stewart said about hypnotism it is much on the same line as the other remedies. We can find no single remedy to eradicate the alcoholic habit, but every means that helps towards that end should certainly be adopted. Dr. Stewart's paper on epilepsy, read some time ago, simply looked for cure in educating the brain in every way possible; and the same line of treatment must be adopted in alcoholism. The inebriate must be surrounded by a higher moral tone, and every means we know of to elevate the human being adopted before we can expect any permanent results.

MONTREAL CLINICAL SOCIETY.

Stated Meeting, April 22nd, 1893.

DR. SPIER IN THE CHAIR.

Dr. H. REDDY was elected a member.

Dr. THOMPSON read the report of a case of "Carcinoma Testis." Age of patient 37; father of three children; no history of syphilis or tuberculosis, but his mother had died of cancer. He had injured the organ three years ago. In March, 1892, it was the seat of an acute pain which subsided, but left a hard nodule in the upper part of the epididymis. When

first seen this was non-tender, but the testicle generally became involved and lost its testicular sensation. As the organ was functionally useless, and was causing great depression of spirits it was removed by Dr. Shepherd. To the naked eye the testicle appeared to be tubercular, but microscopic examination showed it to be the seat of cancer and inflammatory changes. The specimen and microscopic sections were also shown.

Two cases of "Bradycardia" were then reported by Dr. GUNN. The first patient was an applicant for life insurance. The pulse beats were only from 28 to 35 per minute. The patient was a well developed male. There was no organic disease of the heart. He was a heavy smoker, but a month's abstinence produced no change in the pulse, showing that the slow pulse was not due to "smoker's heart." Patient was recommended for insurance, but was rejected on account of the bradycardia. This patient was living three years after.

In the second case the pulse was not normally a slow one, but the bradycardia came on during an attack of grippe. Digitalis made the pulse worse, but it gradually improved up to normal, *i.e.*, about 70. Lowest number of beats per minute recorded is three, there being an intermission of 35 seconds between two of the beats. This occurred in an epileptic patient. About 50 per cent. of cases of bradycardia recover. The symptom is often caused by bacterial poison, as well as by disease of the brain, cord or heart.

Dr. KENNETH CAMERON related the case of an old man who at times had a pulse of 48 and at others of 180. The latter was possibly due to an attack of malaria which the patient had 15 years ago. He also saw recently a deaf and dumb boy with sub-acute rheumatism, whose pulse one evening ran down to 46. This was followed in two days by an attack of chorea.

Dr. GORDON CAMPBELL attends a family in which the mother has a pulse between 50 and 60, while that of each child is below 70. The children are from 15 to 28 years of age.

Dr. HALDIMAND had seen, out of 37 applicants for life insurance, three patients whose pulses were between 50 and 54 beats per minute.

Dr. REID had observed a pulse of 95, 90 and 95 on three respective visits in a patient who lived 5,000 feet above sea

level. After a person has lived at that altitude for some time the pulse usually falls to the ordinary number of beats. He had known a miners's pulse to be 60 when in the mine and 80 when on the surface. This was probably due to the atmospheric pressure being greater at a distance from the surface and to the increased respiration on the surface causing an increase in the heart's action.

Dr. SPIER had observed two cases of slow pulse. Normally, in these patients, the pulse was 70 to 75, but during early convalescence after diphtheria the pulse fell to 40 and 48. It improved with diet.

Dr. KIRKPATRICK said that the normal pulse varied, and that it would be better if the text-books would give 65-80 as the limit of health. This subject is very important as regards life insurance. A candidate whose only defect was a pulse of 65 should be accepted for life insurance.

Dr. GUNN replied.

Dr. GORDON CAMPBELL then read a most interesting paper on "Asthma." He divided the causes into predisposing and exciting, giving the various theories of its causation. The presence of some one exciting cause renders the patient susceptible to the effect of others which would be impotent of themselves. One symptom noticed by Dr. Campbell, and which is not mentioned in text-books, is the eructation of large quantities of gas, breathing being relieved temporarily by each eructation. This gas is shown to come from the stomach by measuring the abdomen and by the gas tasting of the contents of the stomach. It is not derived from food, as it may occur long after food is taken. He explained that it was drawn into the stomach during the powerful inspiratory efforts. The treatment of asthma is climatic, anti-spasmodic and remedial.

Dr. EVANS believed in the neurotic theory of some forms of asthma and would treat the case accordingly.

Dr. GUNN considered that Dr. Campbell's line of treatment was good. Electricity does not act well. He had used chloroform with a good result in a case where all else had failed. Cilia of bronchi have probably little to do with twisting of the bronchial casts, this condition being due to twisting of the bronchi themselves.

Dr. REID did not think that in a sudden attack there was time for the bronchial mucous membrane to swell up.

Dr. ALLAN said that an irritating gas did not bring on a paroxysm instantly, but that it took some minutes to act.

In reply, Dr. G. CAMPBELL held that the shortness of time which elapses between the irritation of the gas and the attack proved its muscular origin. If due to a nerve storm it is difficult to explain the return of an attack after a year's immunity.

Stated Meeting, May 6th, 1893.

DR. W. GRANT STEWART IN THE CHAIR.

The Secretary read the report of Dr. ORR's case of tracheotomy for a foreign body. The patient, a boy aged 7 years, when first seen was cyanosed and had dyspnoea with a quick, intermittent and weak pulse. After trying, unsuccessfully, to dislodge the body, Dr. Orr performed laryngo-tracheotomy, as it was easier to perform than tracheotomy, and he had no skilled assistant. After opening up the trachea the patient was placed on his face with his head held down so as to prevent blood from flowing into the trachea. While in this position the patient began to retch, and the foreign body, which turned out to be a screw-nail, dropped out on the floor. The wound was completely closed by strips of plaster and the boy made a perfect recovery. Dr. Orr had constructed a temporary tracheotomy tube out of a piece of silver catheter and a large cork.

Dr. H. D. HAMILTON suggested that external manipulation might be beneficial in cases like the above.

In reply to a question of Dr. MORROW's as to what position the body had occupied, Dr. Gordon Campbell said that as retching had caused it to fall out it must have been above the vocal cords and have fallen out of the mouth.

Dr. W. GRANT STEWART remarked upon the difficulties of a tracheotomy even with skilled assistance and congratulated Dr. Orr upon the success of his case when he had to perform the operation alone.

Dr. ALLAN then read a very interesting paper on "Empyæma," going especially fully into its causes, prognosis and

treatment. Some authorities hold that when it is due to diplococci you should aspirate, but in other cases you should open up the pleural cavity and drain. He related a case in his own practice which showed that one ought not to be too precipitate in performing Esthlander's operation in children, his case recovering without it. Aspiration is usually of service in pleurisy with effusion, but must be performed early to be of any benefit in empyæma, as if done late the tube is apt to become blocked up by lumps of pus. Continuous syphon drainage is very useful but difficult to carry out, owing to the patient requiring to keep so still. Incision and drainage is the commonest mode of treatment among English surgeons, but Esthlander's operation is very good in picked cases. Most observers practice as little washing out of the cavity as possible, as the new granulations are easily broken down. Double empyæma, although formerly always fatal, is not so now. Two cases have been recently reported in the *Lancet*. One pleura is usually operated on before the other.

Dr. KENNETH CAMERON said that if pus was left too long in the pleural cavity, the lung remained collapsed. He described a very useful method of causing the lung to expand by the patient's blowing into a bottle filled with fluid, which ran out of the bottle through a tube into a second one.

Dr. EVANS had observed that empyæma was very insidious in children, as the effusion may come on without giving rise to any symptoms. He cited the case of a child brought to him simply because its breathing was peculiar, although the chest was full of fluid.

Dr. MORROW wished to add to the list of causes mentioned by Dr. Allan. He had seen a patient in whom a renal calculus had set up an abscess which burst into the pleural cavity.

Dr. GORDON CAMPBELL related a case of localised empyæma which had burst into a bronchus. The man had expectorated quantities of pus at intervals for some time.

Dr. W. GRANT STEWART spoke of a young man who had spat up pus for a long time. He had consulted the leading physicians in England, etc., but none could discover the cause.

Selections.

My First Case.—My first case of obstetrics was somewhat unique, and of course made a lasting impression upon me. I was not yet a graduate, but I had attended two sessions and considered myself quite skilful and scientific. My preceptor took me in charge one day, and introduced me to an old colored lady who was about to be confined. This lady carried considerable weight with her—I believe she weighed about three hundred pounds—and, as the weather was very hot, the case proved to be quite interesting. I remember having read somewhere that the doctor should sit down quietly and read a book, wait for matters to develop and not be too meddlesome. I found an old almanac, but could not read a word of it, for I had an attack of globus hystericus; and as I was trembling and gasping for breath, two old coloured ladies came in—one of them was Ol' Auntie Smith, who was known as a great nurse. Ah! but wasn't this an angel's visit? The patient now had strong pains, and the nurse said, "Doctah, is you gwine to try a pain?" Never having seen a case before, and not understanding her, I tried to look wise and answered "Bimeby." In a short time the labour was more advanced, and the old nurse called upon me again, "Please, doctah, you bettah 'zamine dis yer lady." Accordingly I passed my hand somewhere in the region of the vulvæ, and suddenly there was a tremendous gush and splashing sound which almost demoralized me; still I congratulated myself upon my bravery in this supposed case of "terrible hæmorrhage," and, not wishing to alarm the bystanders by exposing my ghastly, blood-stained hand and arm, I remained petrified, as it were in the same position. Just then the old nurse said, "Doctah, I reckon de wattahs is done broke, ain't dey?" Ye gods! what a relief this was to me. I suddenly remembered that there was such a thing as the rupture of the membranes, and, withdrawing my hand, it is needless to say I had more respect for that old nurse than for any lady I ever saw. The baby was born immediately, and, with some encouragement and instructions, I recovered myself sufficiently to tie the cord. The baby was placed in a

cradle, and the nurse exclaimed, "Yo' pufessional gen'lemen ginally waits 'bout a half ouah fur de afterbuf, don't you, doctah?" "Yes," said I, but, owing to the great strain upon my nerves, the re-action had now come on and I hadn't the remotest idea of what the old nurse meant. We didn't have to wait, however, for the afterbirth came away in a minute or two, and the patient herself exclaimed, "It's done come, Auntie; it's done come." The old nurse removed the afterbirth and soiled clothing carefully, and took a nice clean band and applied it snugly around the patient. And this was the end of one of the easiest and most natural cases I ever attended. While washing my hands in an adjoining room, I overheard the old nurse saying, "Dat ar young gen'leman's a mighty fine doctah; he 'minds one of the doctahs down Souf, wen I lived in ole Virginny." These good old souls have long since passed away and crossed the river, where they are now resting under the shade trees.—G. A. Williams, M.D., in *The Medical Age*.

Compound Comminuted Fracture of the Upper Third of the Femur; Recovery.—Willie Dash, aged ten years, admitted to the

University Hospital on September 27th, 1891. Family history good, previous personal history unimportant. At the above date he fell from a willow tree to the ground, sustaining a compound comminuted fracture of the upper third of the right femur. There was extensive laceration of the soft parts and the femur was broken into three pieces. One piece was triangular in shape, and was entirely detached from the rest of the tissues. As it was impossible to keep the fragments in apposition, they were wired together, including the loose triangular piece, and the soft parts were sutured *without drainage*. This was an experiment which was watched with great interest, as it was expected that the loose portion of bone would necrose and cause trouble. Such was not the case, however, as the bones united promptly and the soft parts healed with suppuration. A fenestrated plaster of Paris splint was applied over an antiseptic dressing. He had also many bruises distributed over the body. He did not suffer severely and on the third day he was quite comfortable. There was some ten-

dency to shortening, and an extension apparatus was applied, which was subsequently replaced with a long splint. The wound healed practically under one or two dressings, and the stitches were not removed for thirty days. The patient left the hospital December 5th, 1891, with his bones firmly united and the wound healed, two months and two days from the time of his entrance. I call attention especially to the union of the fracture, one piece having been entirely detached, removed, cleaned and wired in position, and to the speedy and satisfactory healing of the extensive lacerated wound without drainage and without suppuration. During the first week the temperature varied between $97\frac{2}{3}$ and 102° , subsequently becoming and remaining normal.—*Maryland Medical Journal*, March 11th, 1893.

A Danger to Surgeons.—An interesting observation made by Prof. Albert on himself emphasizes the importance of caution on the surgeon's part in the use of the poisonous antiseptics, especially corrosive sublimate solutions. At a recent meeting of the Vienna Medical Society, the professor stated that for some time he had suffered from dyspepsia, for which no cause could be assigned by the physicians he had consulted. Lately the condition had become very troublesome, and the thought had occurred to him that the constant and free use of corrosive sublimate in his operations might have some share in the causation of the dyspepsia by reason of the absorption of small amounts of this drug. Accordingly he had his urine examined by Prof. Ludwig, the entire quantity passed during twenty-four hours being tested. The examination revealed the presence of iodide of mercury in quantities comparatively large if the manner of absorption of the substance be considered. While Professor Albert is not positive that his dyspepsia is due to chronic mercurial poisoning, he thinks that the facts that his finger nails have lately become softer and that he has lost three healthy teeth, seem to point in this direction.

Employment of Light in the Treatment of Disease.—Arnold (*Pacific Medical Journal*, November, 1892,) advises the use of sunlight as having distinct germicidal properties, especially when concentrated.

He filters the heat-rays out of a beam of sunlight with a flat cell (a common whiskey flask free from flaws does well) filled with a saturated solution of alum, and then condenses the light upon the affected part by means of a common lens. He has obtained distinct escharotic effects from a greater degree of concentration, although cosmoline would barely melt at the focus of the lens, a temperature of about 120° F. The effect is obtained with little or no pain, although the entire thickness of skin is reduced to a whitish pulpy mass. Hence it is plain that concentrated light, minus its grosser heat, is both anæsthetic and escharotic, the last in a mild degree.

A Remarkable Deformity of the Pelvis, in Consequence of Fracture of the Sacrum.—A woman brought into the gynecological ward of the Philadelphia hospital, on December 16th, gave the following history:

Age thirty-two. Has had six children, the last, three years ago. Three months ago, during a menstrual period, she fell from a third-story window striking with an unbroken fall upon the brick pavement of the yard below. One leg was broken, the skull, she thinks, was fractured, and some injury, she believes, was inflicted on the backbone. Since the fall she has not menstruated, and has suffered severe pain in the lower abdomen, which, however, of late has steadily decreased. She was transferred to our department from the surgical ward after her head injury and the broken leg had been repaired. An examination of the pelvis gave the following result: The uterus is in good position, movable; behind and to the right is a mass that gives me the impression of a diminishing, encysted hæmatocele. Directly the finger enters the vagina, a peculiarity of the posterior pelvic wall attracts attention. The coccyx and lower sacrum are much higher than they should be in the pelvic cavity, and they project forward at a right angle to the rest of the sacral bone, so that they encroach, to an extraordinary degree, upon the antero-posterior diameter of the pelvis. An external examination shows a transverse fracture of the sacrum at the level of the posterior inferior spinous processes of the iliac bones, a dislocation of the lower fragment inward, and a firm bony union

of the two fragments at a right angle. From the seat of fracture to the tip of the coccyx, the pelvimeter measures seven centimetres. From the tip of the coccyx to the lower edge of the symphysis pubis the measurement is seven and a half centimetres. Thus the antero posterior diameter of the pelvic outlet is reduced three and a half centimetres or almost one and a half inches, for the backward displacement of the coccyx in labour, that increases this diameter from nine and a half to eleven centimetres, has become impossible. I believe, therefore, that should this woman again become pregnant a symphysiotomy or a Cæsarean section would be necessary for her delivery, most likely the latter.

Out of 13,200 fractures reported from nine large hospitals in this country and in Europe, but 0.8% were fractures of the pelvis; and in this small proportion, fracture of the sacrum figures as the least frequent of all injuries to the pelvic bones. When one considers that almost all grave injuries to the pelvis end fatally, the rarity of a pelvic deformity in a woman of childbearing age dependent upon a united fracture of a pelvic bone may be appreciated. In a rather cursory search through obstetrical literature I cannot find anything just like this case.—*Boston Med. and Surg. Journal*, Jan. 5, 1893.

Healing of Chronic Ulcers. — Votey (*The Physician and Surgeon*, Jan., 1893), recommends chicken skin as a graft for weak indolent ulcers of the leg. He procures a spring chicken, and, as soon as it is killed, he takes a piece of skin from under the wing and places it in a one-four thousandth bichloride solution. This he cuts into pieces one-tenth to one-fourth inch square, and the ulcer and surrounding parts having been carefully cleaned, these pieces are laid upon the granulating surface near the circumference. Over this is placed a layer of lint spread with iodoform ointment, then covered with bichloride cotton and bandaged. The patient is instructed to remain in bed. He reports five cases treated by the method and in which he obtained good results. He says in conclusion: "With the exception of the last these were unpromising cases, in which other means had been tried with poor results. Chicken skin furnishes a graft easily procured, and in sufficient quantity. It is easily applied, and produces

a cicatrix much smaller, and not so contractile as by strapping or other methods. Whether or not it is durable would remain to be answered by further investigation, but so long as seen these cases showed no tendency to break down again."

To Cut Short Whooping Cough in Twenty-four Hours.—The *Illustrated Medical Journal* says that Dr. Moncorro treats pertussis with a ten per cent. solution of resorcin, by applying the solution every two hours to the perigloteal region with a throat-brush. The application is made four or five times at each seance. The theory of the treatment is that the disease is due to a micro-organism and affects primarily the larynx. Cultures of the micro-organisms have been destroyed by the smallest amount of resorcin.

Lipoma of the Tongue.—M. Weill (*Union Med. du Nord Est*, January, 1893,) reports a case of lipoma of the tongue occurring in a man aged 71. There was no venereal history, but a history of alcoholism and excessive smoking. The tumour appeared three years before on the right border of the tongue, about four cent. from the tip. It grew slowly, until at the time of the operation for its removal it had attained the size of a filbert. The mucous membrane covering it was thinned and showed the yellow colour beneath. The growth was senile and appeared to penetrate into the substance of the tongue, pushing aside the muscular fibres. It was oblong, smooth and presented a characteristic softness and false fluctuation. To the touch it was multilobar. Tactile sensibility was unimpaired, as also was motion. Taste was blunted all over the tongue, probably from the use of alcohol. There was no enlargement of the glands in the neighbourhood. An incision three cent. long was made over the mass, which was then easily shelled out, and the edges of the wound approximated by sutures. Recovery uneventful. It proved to be a pure lipoma. The case was reported before the Société Médicale de Reims, and in the discussion M. Guélliot stated that only twenty cases had been reported, and that some of them were myxo lipomata of congenital origin.

THE PAN-AMERICAN MEDICAL CONGRESS.

The Section in Marine Hygiene and Quarantine has been organized as follows: Honorary presidents—Dr. Lino Alarco, Lima, Peru; Dr. Henry B. Baker, Lansing, Mich.; Dr. Cardenas, Managua, Nicaragua; Dr. J. J. Cornilliac, Martinique, F. W. I.; Dr. Felix Formento, New Orleans; Dr. H. B. Horlbeck, Charleston; Lieutenant-Colonel Amalió Lorenz, Sub-inspector of second class Spanish Navy, Havana; Dr. F. Montizambert, Quebec, Canada; Dr. Francisco Nunez, St. Tecla, Salvador; Dr. Juan Ortego, Guatemala, Guatemala; Dr. Joseph Y. Porter, Jacksonville, Fla.; Dr. John Pringle, Kingston, Jamaica; Dr. Juan J. Unoa, San José, Costa Rica; Dr. J. Mills Browne, Surgeon-General United States Navy. Executive president—Dr. Walter Wyman, Surgeon-General United States Marine Hospital Service, Washington. Secretaries—Dr. S. T. Armstrong (English-speaking), 166 West Fifty-fourth street, New York; Dr. G. M. Guitéras (Spanish-speaking), United States Marine Hospital Service, Washington. Advisory Council—Dr. H. M. Biggs, New York city; Dr. John C. Boyd, United States Navy; Dr. H. R. Carter, Norfolk, Va.; Dr. W. M. L. Coplin, Philadelphia; Dr. A. G. Clopton, Galveston, Texas; Dr. C. G. Currier, New York; Dr. S. Durgin, Boston; Dr. Seneca Egbert, Philadelphia; Dr. George Homan, St. Louis; Dr. W. T. Jenkins, New York; Dr. J. F. McShane, Baltimore; Dr. G. H. F. Nuttall, Baltimore; Dr. S. R. Olliphant, New Orleans; Dr. Dabney Scales, Mobile; Dr. R. M. Swearingen, Austin, Tex.

The Executive President desires to call the attention of all members of the medical profession that are interested in the topics pertaining to this section to the regulation of the Congress, that contributors are required to forward, not later than July 1st, to the secretary of the section, abstracts, not to exceed six hundred words each, of the papers they propose to present before the section.

The topics that will be considered by this section are as follows: 1. The hygiene of vessels, commercial or naval, including the questions of ventilation, heating, sanitary arrangements,

the disposal of cargo so as to facilitate disinfection, food supply, etc. 2. The medical officers of passenger vessels; methods for their selection, duties, etc. 3. The vital statistics of seamen and firemen. The question of the medical examination of crews preparatory to shipping. 4. The supervision of vessels by government medical inspectors at ports of arrival and of departure. Code of rules for handling an epidemic disease that breaks out on shipboard. Disinfection of passengers and crew during a voyage. Location and arrangements of ships' hospitals. 5. Epidemic and exotic diseases propagated by shipping. What diseases should be quarantined. Responsibility of nations for epidemics; India for cholera, South America for yellow fever. Can a feasible plan be devised to totally exterminate cholera? International intervention to prevent the propagation of cholera or other epidemic diseases by pilgrimages or immigration. 6. International uniformity in quarantine regulations. Should quarantine officers be notaries public? 7. Arrangement of detail and equipment of quarantine stations: *a*, inspection stations; *b*, local quarantine stations; *c*, refuge stations. Methods for handling infected or suspected vessels. Interstate and inland quarantine: sanitary cordons; camps of refuge; camps of probation. Recent improvements in hospitals for infectious diseases. Railroad inspection and quarantine. Length of time vessels should be held in quarantine. Conditions that should determine proclamation of quarantine against a country. Under what requirements may passenger traffic be carried on between a port infected with yellow fever and a Southern port of the United States during the summer with the least obstruction to such traffic? What merchandise should be considered as requiring treatment if shipped from a port or place infected with cholera, yellow fever, or small-pox? Methods of disinfection: *a*, persons; *b*, baggage; *c*, cargoes; *d*, vessels. Recent improvements in quarantine appliances; steam chambers; sulphur furnaces. Liquid sulphur dioxide as a disinfectant. Treatment of ballast: water; solid. What time should an infected vessel be detained in quarantine: *a*, for cholera; *b*, for small-pox; *c*, for typhus fever; *d*, for plague; *e*, for yellow fever. Methods of disposal of the bodies of those that die while in quarantine.

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PREVENTION OF TUBERCULOSIS.

We are glad to learn that a League for the Prevention of Tuberculosis is about to be formed here. It will be conducted much upon the same lines as the *Ligue preventive contre la Tuberculose*, an organization in France which owes its origin to the foresight and energy of Dr. Armaingaud and which promises to do excellent work.

The object is to interest and instruct the public in those simple, common-sense measures by which infection from tuberculosis patients may be prevented. We wish this new association a long and successful career.

THE ROYAL VICTORIA HOSPITAL.

At a recent meeting of the Board of Governors of the Royal Victoria Hospital Dr. Roddick was appointed Attending Surgeon, Dr. James Stewart Attending Physician, and Dr. Adami Pathologist.

Dr. Roddick is Professor of Surgery at McGill University and has for twenty-five years been connected with the General Hospital, at first in the capacity of House Surgeon and later in that of Attending Surgeon.

Dr. Stewart was elected in 1886 to the position of Assistant Physician to the Montreal General Hospital and of Attending Physician in 1890. He is Professor of Medicine at McGill University, and for the last ten years has been closely identified with that learned institution.

Dr. Adami has not been with us very long, but already has

won golden opinions for his grasp of the subject, the professorship of which he holds. He is a graduate of Cambridge University and a Fellow of Jesus College and came to Montreal to take charge of the newly created chair of pathology at McGill University.

At the meeting of the Corporation of the Montreal General Hospital, when the resignations of Drs. Roddick and Stewart were received, the following vote of thanks was unanimously adopted :

“ That this Corporation desire to place on record their appreciation of the great value of the services rendered by Drs. Roddick and Stewart during the long period in which they have been officially connected with the medical direction of the hospital, which, in the case of Dr. Roddick, covers about twenty-five years, while that of Dr. Stewart extends over six years.”

We wish our editors and their colleague all success in their new positions, and congratulate the Royal Victoria Hospital on obtaining such an able and experienced Medical Board.

THE ELEVENTH INTERNATIONAL MEDICAL CONGRESS.

The following invitation has been sent to the Governor-General asking the participation of Canada in the Eleventh International Medical Congress, which will be held in Rome from the 24th of September to the 1st of October of this year :

MY LORD—In 1893 Italy will celebrate in Rome the triumph of the science which devotes efforts and labour to softening mankind's burden of misery—Medicine.

From the 24th of September to the 1st of October, 1893, shall take place the eleventh session of the International Medical Congress, and thus will be fulfilled the wish expressed by the congressists at the preceding meeting, Berlin, 1890.

This pacific meeting, dedicated to scientific work, shall not only affirm the power of human intellect, but will in the meantime newly demonstrate how, under the dominion of science, vanish the rivalries of nations and humanity becomes the common home.

The central committee, bearer of the news of all Italian physicians, takes the liberty to pray, through Your Lordship, the most honourable Government of the colonies of Great Britain and Ireland in Canada, to partake at this meeting by means of special delegates, and fervently hope that, considering the sublime aim its efforts are directed to, this prayer may be kindly granted.

With the profession of profound devotion, have the honour to remain,

For the Central Committee, Your Lordship's most obedient,

(Signed) PROF. GUID. BACCELLI,
President,

(Signed) PROF. E. MARAGLIANO,
Secretary.

ROME, August 20, 1892.

Members of the Canadian Medical Association who propose attending the Congress can obtain certificates of membership from Dr. H. S. Birkett, Secretary Canadian Medical Association, Montreal.

RHOPALOCEPHALUS CARCINOMATOSUS.

This new parasite of cancer has been discovered lately by a Russian, Dr. Korotneff. For several years the idea has been gaining ground that carcinoma is caused by parasites, and that these parasites, unlike the various forms of bacteria, are animal not vegetable. These animal forms have been named coccidia, and are supposed by the irritation of their presence and products to cause the increase in the cellular elements so characteristic of cancer. Korotneff, in the course of some observations on an epithelioma of the upper lip, found a "great quantity of a peculiar parasite, to which he gave the name of *Rhopalocephalus Carcinomatosus*." It is ribbon-shaped, long and narrow, with the anterior extremity somewhat thickened and resembles a young *tænia solium*. In the thickened part (the head) is a granular nucleus, without nucleolus, staining strongly with gentian violet, a deep red colour which is very characteristic, the nuclei of the other cells being stained deep

violet, almost black. He classes this parasite with the rhizopods, considering the long, narrow part as a pseudopod very much lengthened. Bondi's reagent gives the body (the plasma) a very characteristic yellowish red colour.

While recognizing that it is premature to draw definite conclusions, Korotneff believes that this parasite is the starting point of the cell-nests. It penetrates into a cell which it does not destroy but excites to increased action. This reacts on the surrounding cells in a deleterious way, they are flattened and pressed back about the diseased cell, which thus becomes the focus of a nest. Sometimes two neighbouring cells are thus affected; as the nest of cells develops the number of parasites increase. In no case was an alveolus found without one or more of the rhopaloccephali.

As to the coccidia, the author thinks that they too can be the starting point in the formation of nests of cells, but these alveoli may be distinguished by two characteristics: 1, The cavity is more strictly limited, and 2, There are fewer flattened cells about the centre.

Dr. Korotneff has not yet finished his labours, and we trust soon to hear more from him on this important subject.

PROTESTANT HOSPITAL FOR THE INSANE.

The report of the Medical Superintendent of the Protestant Hospital for the Insane for 1892 is a most gratifying one, and from it we quote the following extracts as showing the work done in this institution:

The number of admissions was 101, many male patients having been refused on account of the crowded state of the male wards. The number remaining in hospital is 185, of whom 114 are males and 71 female. The number discharged as recovered was 48, as improved 15, and as unimproved 8, while 10 died. This gives a percentage of recoveries on the number admitted of 47.52, and of deaths on number under treatment of 3.71, while the total number of discharges was 70.29 on the number admitted. Of those received, 14 were so

advanced in years as to leave but little prospect of amendment, 3 being over 80 years of age, 5 over 70, and 5 over 60. The youngest patient admitted was 17 and the oldest 84 years. The former made a good recovery, while the latter shows no improvement. Of the various causes assigned for the disease mental anxiety and worry ranked first, while domestic trouble and grief were equal with intemperance holding second place. Heredity was admitted in 31 per cent., while in 33 per cent. no definite information could be obtained on this point.

In the matter of education, only 19 per cent. were of superior intellectual attainments, while 13 per cent. were totally uneducated, and 18 per cent. could not write. "The better the education, within certain limits, the less probability of insanity. Many reasons have been advanced for this proneness to brain disease among the uneducated, but to me it has always seemed that the primary cause lies in the lack of sufficient mental exercise. As the muscular system deteriorates for want of sufficient physical exercise, so the brain suffers for want of mental. Like the muscles, the brain may be overtaxed, or, on the other hand, not receive sufficient employment. The athlete breaks down from over-training—the muscles of those who take no exercise are weak for want of it. In like manner the brain may fail from over-stimulation or too little of it. As in physical culture, so in mental, we should aim at the happy mean suitable for each case, and, to attain the best results in both mind and body, mental and physical culture should go hand in hand."

Some of the patients had been suffering from mental disease for many years before admission, one as long as thirty years, and a protest is entered against the delay in bringing such cases to hospital, as "the curability of insanity by proper hospital treatment is markedly in direct ratio to an early resort thereto, and yet how often is it looked upon only as a last." The Superintendent also remarks on the number of relapses occasioned by the premature removal of patients by their friends, who listen to the pleadings of the patient rather than to the advice of the medical attendant.

A plea is entered for a change in the law, by which patients

may be received on their own written request for admission, as is now done in some European countries and some of the States of the Union.

“In connection with the admission of patients the question is often asked us: How can we best get the patient to the hospital quietly? In nine cases out of ten the friends resort to subterfuge. To all such I would say, you are directly injuring the patient by such procedure. Use force, if necessary, even to the extent of calling in the services of a policeman, but *never* deception. It lessens the prospects of cure by making him look upon the institution with dislike, as a prison rather than a hospital, and tends to destroy his confidence in his friends, or regard those in whose care he is placed as alone responsible for his detention. Tell the patient frankly that his physician and friends regard him as *sick*, that he is being taken to *hospital* to give him the best chance of being cured, that as soon as he is well he will be removed again, and that he *must* do as directed.” We give the last extract in full, for coming from one who has had so much experience as Dr. Burgess, it necessarily carries much weight.

During the year 34 patients were allowed out on trial, and of these 20 were finally discharged as recovered. Only five were returned to the hospital. As a rule a patient is given the freedom of the grounds before he is discharged on trial, he giving his word not to leave them without permission. This trial system is found to work well and is attended with beneficial results, the parole being rarely broken when care is taken in the selection of cases.

We congratulate the officers of the hospital on their excellent showing as regards the percentage of cures and also the general health of the patients.

THE LATEST MEDICAL AID SOCIETY.

From Cincinnati comes the news of a new departure in medicine, or rather in the way of a society for supplying medical attendance at a cheap rate. A company has been formed which

proposes to supply medical and surgical attendance to families at a fixed rate per annum. The following is the prospectus which they have issued and which is rather a curiosity in its way :

AMERICAN FAMILY PHYSICIANS' COMPANY.

810 NEAVE BUILDING, CINCINNATI, O.

Prospectus.

“This company was organized and is now endorsed by Cincinnati's leading professional and business men.

“The plan and scope of the American Family Physicians' Company gives to those families who desire such protection an absolute and sure method of providing a physician and surgeon of the highest professional standing, for sickness or accident to any and all members of the family.

“The company also provides all the medicine necessary in such cases.

“The company also provides all medical and surgical appliances necessary in the treatment of these cases.

“You are not annoyed running first to the office of one physician and then to another to find him in, you simply go to the nearest telephone, call up our office, and a physician is at your house in a few minutes. You are absolutely assured of service at once, the best to be had in the city.

“You never receive a doctor's bill with a polite request to settle, and just at the time when you need the money for something else.

“You are healthy now, but you do not know how soon you may be a confirmed invalid, when the best attention will be necessary; then is when the bills run up, then is when you will need the service. Prepare yourself in advance; join with us now.

“The cost of membership is certainly low enough for all to enjoy its benefits. Class A—For a family consisting of not more than four members, \$15.00. Class B—For a family of more than four and not over six, \$18.00; and Class C—For a family of eight or more, \$20.00 per year, payable monthly, quarterly, semi-annually or annually, in advance.

“ We take you if you are in good health now ; no examination is necessary.

“ A policy will be issued to each family and to single persons.

“ Obstetrical cases are all paid by the company.

“ It is a matter of efficient and economical service for every policy holder, so do not delay.”

It is stated that the names of reputable physicians have appeared as connected with the concern, and that the board of directors is composed of business men of high standing in the community.

This is a decided step in advance of the ordinary mutual benefit society, as it is a *bona fide* business speculation, a joint-stock company, and presumably therefore got up for the purpose of making money, for we do not look upon joint-stock companies as philanthropists, hence either the medical man does not get what he is entitled to for the services he has rendered, or else the patient is charged more than he should be. There is no grading of charge according to the means of the patient, but all are admitted at a rate fixed according to the number in the family. This again either lets the rich man off with less than he should pay, or makes the poor man pay more than he can afford, for every medical man, although he does not charge a man more because he is rich, charges another man much less because he is not rich, and indeed attends many patients for nothing.

It is true that the scheme has this to recommend it, a man knows just how much he will have to pay for medical attendance in each year, but apparently there is no guarantee that you will have the same medical man twice in succession, hence the family doctor can no longer be the family friend, but he is reduced to a mere wage earner who has no personal interest in his patients, but only tries to earn his money with as little trouble to himself as possible.

The *Canada Lancet* describes the working of the arrangement in a graphic manner :

“ Mrs. A. is in the first stage, or at least thinks the pains indicate it ; her spouse being a member, the old-time request in the words of the song, “ Run for the doctor Joe,” is rendered

obsolete by the onward march of civilization's ingenuity, he rings up the company's office as one might a livery stable for a hack, and sure enough, with as little delay as though another witch of Endor waved some magic wand, the accomplished obstetrician appears on the scene of commotion, with bag in hand, and possibly a homely but useful article in the shape of bed-pan under his arm ; for are not the company, according to their agreement, bound to furnish all requisite appliances ? The picture may be slightly over-drawn, but to say the least, degradation is complete."

THE PAN-AMERICAN MEDICAL CONGRESS.

The Executive Committee of the First Pan-American Medical Congress promulgates the following information :

1. The First Pan-American Medical Congress will be opened under the Presidency of Prof. William Pepper, M.D., LL.D., President of the University of Pennsylvania, at Washington, D. C., September 5th, and will adjourn, September 8th, 1893.

2. The countries officially participating in the Congress are restricted to Argentine Republic, Bolivia, Brazil, British North America, British West Indies (including B. Honduras), Chili, Dominican Republic, Honduras (Sp.), Mexico, Nicaragua, Paraguay, Peru, Salvador, Republic of Columbia, Republic of Costa Rica, Ecuador, Guatemala, Haiti, Kingdom of Hawaii, Spanish West Indies, United States, Uruguay, Venezuela, Danish, Dutch and French West Indies.

Distinguished representatives of the profession from other countries are expected to be present as guests and to participate in the proceedings.

3. The general sessions will be limited in number, one for opening and one for closing the Congress, being all that will be held, unless some necessity arises for a change in this particular. This arrangement will permit members to employ all of the time in the scientific work of the sections, which are as follows :

(1) General Medicine, (2) General Surgery, (3) Military Medicine and Surgery, (4) Obstetrics, (5) Gynæcology and

Abdominal Surgery, (6) Therapeutics, (7) Anatomy, (8) Physiology, (9) Diseases of Children, (10) Pathology, (11) Ophthalmology, (12) Laryngology and Rhinology, (13) Otology, (14) Dermatology and Syphilography, (15) General Hygiene and Demography, (16) Marine Hygiene and Quarantine, (17) Orthopædic Surgery, (18) Diseases of the Mind and Nervous System, (19) Oral and Dental Surgery, (20) Medical Pedagogics, (21) Medical Jurisprudence, (22) Railway Surgery.

The evenings will be devoted entirely to social features, the detailed announcements of which will be made by the Committee of Arrangements.

4. Membership is limited to members the medical profession of the Western Hemisphere, including the West Indies and Hawaii, who shall either register at the meeting or shall serve the Congress in the capacity of foreign officers. No membership fee will be accepted from any member residing outside the United States. The membership fee for residents of the United States is ten dollars (\$10.00). All registered members will receive a copy of the transactions. Prominent students of the allied sciences will be cordially received as guests and as contributors to the proceedings upon invitation by the Executive Presidents of sections. Ladies' tickets will be issued upon application to registered members only and will entitle the holders to reduced fare and to admission to all entertainments. Physicians of the United States should register at once, by remitting \$10.00 to Dr. A. M. Owen, Treasurer, Evansville, Indiana.

5. Papers are solicited, the hope being entertained that the programme will be largely taken up with contributions from outside the United States. Papers may be read in any language, but a copy must be furnished for publication in either Spanish, Portuguese, French or English, and must not occupy more than twenty minutes in reading. An abstract not exceeding six hundred words must be furnished the Secretary-General in one of the above four languages, by not later than July 10th. Abstracts will then be translated by the Literary Bureau into the three remaining languages, and will be published in book form before the meeting of the Congress.

6. The Congress of the United States has adopted a joint resolution whereby all the Governments of the Western Hemisphere have been invited by the President to send delegates to the First Pan-American Medical Congress, and has appropriated a liberal sum for the purposes of entertainment.

7. The reduced fare offered by all transportation companies on the occasion of the World's Columbian Exposition to be held in Chicago, will be open to all persons attending the Pan-American Medical Congress. The Committee of Arrangements will endeavor to secure still greater reduction to members travelling between Chicago and Washington, and an effort will be made to arrange either excursions or circular tours for those who may desire to visit the great universities of the United States. All such arrangements are open to subsequent announcement.

8. By arrangement with the Committee at Rome, the date of the Eleventh International Medical Congress has been so appointed that those who attend the meeting of the Pan-American Medical Congress may subsequently attend the former. The Pan-American Medical Congress will adjourn on the afternoon of September 8th; a steamship will sail from New York on the following day, going by the Azores and Gibraltar and enabling the tourist to reach Rome on the morning of September 20th, where the Eleventh International Congress will be opened on the afternoon of September 24th. It will thus be seen at a glance that in the period usually allotted to a summer vacation, the medical tourist may spend a week at the World's Columbian Exposition, the next week at the Pan-American Medical Congress, the next week and a half with delightful companions in a voyage to the Mediterranean, the next few days in witnessing the sights of Rome, and the following week at the Eleventh International Medical Congress. Special reduced rates for members and their families are given both ways on the trip to Rome, particulars of which will be furnished on application to the Secretary-General, 311 Elm street, Cincinnati, Ohio, who is also a member of the American Committee of the Eleventh International Congress.

9. The best possible arrangements will be made with the

excellent hotels with which the national capital is abundantly supplied. The Committee of Arrangements will do its utmost to secure desirable rates and locations for members and their families. The headquarters of the Committee of Arrangements is at the Arlington Hotel, where communications may be addressed either to Dr. Samuel S. Adams, Chairman, or Dr. J. R. Wellington, Secretary.

10. Copies of the Official Announcement of the Congress, containing the Regulations and the names of all officers and committeemen of the General Congress and of the various sections, and residing in the various countries, may be obtained upon application to the Secretary-General, or to either of the members of the International Executive Committee, as follows :

Argentine Republic, Dr. Pedro Lagleyze, Calle Artes 46, Buenos Aires ; Bolivia, Dr. Emilio di Tommassi, Calle Ayacucho 26, La Paz ; British West Indies, Dr. James A. de Wolf, Port of Spain ; British North America, Dr. James F. W. Ross, 481 Sherborne street, Toronto ; Chili, Dr. Moises Amaral, Facultad de Medicina, Santiago ; Costa Rica, Dr. Daniel Nunez, San José ; Dominican Republic, Dr. Julio Leon. Santo Domingo ; Ecuador, Dr. Ricardo Cucalon, Guayaquil ; Guatemala, Dr. José Monteros, Avenida Sur No. 8, Guatemala City ; Haiti, Dr. T. Lamothe, Rue du Centre, Port au Prince ; Hawaii, Dr. John A McGrew, Honolulu ; Honduras (Spanish), Dr. George Bernhardt, Tegucigalpa ; Mexico, Dr. Tomas Noriega, Hospital de Jesus, Mexico ; Nicaragua, Dr. J. I. Urtecho, Calle Keal, Granada ; Paraguay, ——— ; Peru, Dr. Manuel C. Barrios, Facultad de Medicina, Lima ; Republic of Colombia, Dr. P. M. Ibanez, Calle 5a Numero 99, Bogota ; Salvador, Dr. David J. Guzman, San Salvador ; Spanish West Indies, Dr. Juan Santos Fernandez, Calle Reina No. 92, Havana ; United States of America, Dr. A. Vander Veer, 28 Eagle street, Albany, N. Y. ; United States of Brazil, Dr. Carlos Costa, Rua Largo da Misericordia 7, Rio de Janeiro ; Uruguay, Dr. Jacinto de Leon, Calle de Florida No. 65, Montevideo ; Venezuela, Dr. Elias Rodriguez, Caracas.

Medical Items.

—A French *savant* is studying the language of chickens.

—The City of New York cares for 18,000 lunatics at a yearly cost of \$625,000.

Dr. E. D. Aylen has been appointed anaesthetist to the Montreal General Hospital.

—Dr. Nicholas Senn, of Chicago, has been appointed Surgeon-General of the State of Illinois.

Dr. E. A. Grafton, (McGill '91) has obtained the licentiate of the Society of Apothecaries of London.

—Baltimore is to have a hospital for infectious diseases, and \$45,000 has been appropriated for that purpose by the city.

—In London an increase in the number of cases of ophthalmia has been attributed to the fumes rising from the wood pavement after rain.

—Dr. J. D. Cameron and J. W. Hewetson have been appointed to fill the positions of Non-resident Clinical Assistant, and Resident Accoucheur, at the Montreal Maternity Hospital.

—Drs. J. A. Henderson, A. D. McArthur, S. R. McKenzie, J. L. Walker, and J. W. Lawrence, have been elected Resident Medical Officers at the Montreal General Hospital for the ensuing year.

—The Sheriff has closed the Keeley institute at Chicago. The director charges the failure to the inability of the institute to exert the same control over the Chicago saloons that Keeley does over those of Dwight.—*Cin. Lancet-Clinic.*

—At the meeting of the Governors of the Montreal General Hospital, held May 18th, Dr. Sutherland was elected Attending Surgeon, Dr. Finley Attending Physician, Dr. Elder Assistant Surgeon and Dr. Gordon Campbell Assistant Physician.

DEATH IN THE PROFESSION ABROAD.—Dr. Kundrat, court councillor and professor of pathological anatomy at Vienna, died April 25th, of apoplexy. Dr. Friedman, the Austrian balneo-therapeutist, aged 60. Dr. Hartman, of Berlin, professor of anatomy, and first prosecutor of the Anatomical Institute, on April 27th.

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