

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE
MONTREAL MEDICAL JOURNAL.

VOL. XX.

AUGUST, 1891.

No. 2.

Original Communications.

ON INFANTS' FOOD.*

By A. D. BLACKADER, B.A., M.D.,

Lecturer on Diseases of Children, McGill University; Assistant Physician, Montreal General Hospital.

One of the subjects which must give us no little thought and trouble at all times, but especially during the summer weather, is how to feed the infant deprived of its maternal supply. Its food must be sufficiently nourishing—*i.e.*, should contain albuminous, fatty, saccharine, and saline ingredients in proper proportions, neither too little nor too much, or nutrition will suffer; it must be easily digestible, else will colic, vomiting or diarrhoea supervene; and it must be practically a sterilized food, free from bacteria or other micro-organisms, else will the infant run the chance of being poisoned by some product of their activity. Many investigators are endeavouring to solve the difficulties which surround the subject. Practically, all unite in regarding cow's milk, or some preparation of it, as the only serviceable substitute for human milk. He would be a rash physician who would dare to order a permanent diet for an infant in which milk did not enter; and every patent food in the market is dependent on it for much of its nutritive material.

The use of cow's milk, however, is attended with some difficulties, which must be clearly appreciated, and overcome, if we would succeed in attaining our three requisite conditions. These difficulties may be briefly stated as follows:

1. Cow's milk contains about double the amount of the

* Read before the Medico-Chirurgical Society of Montreal.

albuminoids that human milk does, and these albuminoids appear to contain the curd-forming elements in much larger proportion than do the albuminoids of human milk. This large amount of curd is apt to prove a source of indigestion to the infant. The fats and sugars are found in slightly larger amount in human milk than in pure cow's milk, and human milk is always distinctly alkaline, while cow's milk, even when fresh, gives generally a slightly acid reaction.

2. Cow's milk as ordinarily obtained, especially during the hot season, swarms with many varieties of microbes, for which it forms an excellent culture fluid, and during summer weather infant foods prepared with it are generally contaminated with multitudes of these organisms, and with their frequently poisonous products.

3. As cow's milk can be obtained in almost unlimited quantities, and can be supplied to the infant without any regard to regularity, or interval between times of feeding, we have not the same check on the amount, as we have when the infant is dependent on the breast, and with careless or ignorant nurses, we are apt to have complicating the other two difficulties, that of over-feeding.

Each one of these difficulties alone could defeat an attempt to nourish an infant with cow's milk, but operating, as is usually the case, together, it is little wonder that artificial infant feeding often means infant atrophy, and that such a large percentage of such cases, especially in our province, and in our city, perish during the summer months from diarrhoeal diseases.

Recent investigation, however, has done a great deal, and, theoretically, all the above difficulties have been solved, yet, clinically, we still find ourselves in trouble.

During the early part of the winter I was confident that we had at last obtained sufficient data on which to construct an ideal infant's food. Our knowledge of the composition of the two milks was sufficiently accurate to enable us to alter the one to make it closely resemble the other in chemical composition. By careful sterilization, with Soxhlet's apparatus, or in an Arnold sterilizer, in bottles holding just sufficient for the one feeding, the milk thus prepared can be administered to the infant

in a practically sterile condition ; while—thanks to the work of Snitken, Holt, and others—we have definite and correct ideas of how much should be given at each time of feeding, and the interval that should elapse between the feedings.

In some of my cases, these means carefully carried out yielded gratifying results, but in others my hopes were disappointed. The infants, though apparently free from digestive troubles, did not thrive, continued to look puny, and only very slowly increased in weight, clearly indicating that my food was faulty.

Since then several communications have from time to time appeared in our medical magazines, where others have related a similar experience ; and corroborating this clinical experience, Dr. Hiesland of Philadelphia and Dr. Leeds of New York have published the results of their individual investigations on the effect that prolonged heat has on the milk. They both speak very similarly of the changes which milk undergoes in the sterilizing process. Their observations may be briefly epitomized as follows :—

I.—The starch liquifying ferment, galactozymase, which exists in normal cow's milk in minute quantities, is destroyed when the heat rises much above 165°F. (75°C.).

II.—A portion of the lactalbumin is coagulated.

III.—The casein, after the action of prolonged heat, is less readily coagulated by rennet, and yields slowly and imperfectly to the action of pepsin and pancreatin.

IV.—The fat globules are injuriously affected by the heat. The fat is freed to some extent, and after standing, small lumps of butter fat are sometimes observed on the surface of the milk, while the portion not freed has a decidedly lessened tendency to coalesce. When sterilized and unsterilized portions of milk were churned, and a note made of the time required to form appreciable amounts of butter, the unsterilized was found to yield a larger amount in considerably less time than the sterilized.

V.—Milk-sugar, by long-continued heating, is completely destroyed ; that it undergoes some change in the process of sterilization is shown by a lessened dextro rotatory power.

It would appear, therefore, that milk, sterilized as we have been doing it, must be regarded as distinctly less readily and less perfectly digestible than raw milk. The destruction of the galactozymase, the coagulation of the lactalbumin, and the alteration of the casein, so that it is more slowly acted on by rennet, all presumably diminish its digestibility by the gastric juice of the infant; while the changes in the fat globules, noted after prolonged sterilization, whatever be their nature, must interfere considerably with their digestion and assimilation.

Yet even with these disadvantages, the testimony of most of the physicians connected with the large foundling hospitals and dispensaries of New York is that it is decidedly to be preferred, as the lesser of two evils, to milk swarming with bacteria. Under its use, the percentage of lives saved has been largely increased, and the number of cases of summer diarrhoea much diminished. But is it not possible to avoid these disadvantages? We all know the benefit that ensues in most cases, when we are able to order the infant to the fresh milk and pure air of the country. Sometimes, for those living in the suburbs, it may be practicable for the family to keep their own cow and attend carefully to its feeding and milking. But for the great majority of the infants in our city, neither of these plans are available; and the question arises, Is all this sterilization necessary to obtain a practically sterile food? Dr. Leeds answers in the negative. He finds that cow's milk rendered feebly alkaline, and heated, as soon as received in the morning, to a temperature of about 155°F. (68°C.) (somewhat short of the degree of heat necessary to coagulate the galactozymase), is rendered practically sterile. His remarks on this point may be quoted:

“It is evident, in the first place, that no milk having an acid reaction, is in a proper condition to be heated, because of the effect of acidity upon coagulation. And inasmuch as cow's milk, as delivered to consumers, has usually developed a notable acidity, the addition of the requisite amount of a suitable alkali is the first point to be considered.” By experiments he found that it required, to neutralize this acidity, about $2\frac{1}{2}$ grains of sodium carbonate or $9\frac{1}{2}$ grains of ordinary liquor calcis to the pint of

milk. "On making gelatine-peptone cultures, one drop of the original milk yielded 400 colonies of bacteria after five days' culture at common temperatures, while the same milk rendered very feebly alkaline with lime yielded 250 colonies. Another sample yielded, per drop, 43 colonies after four days and 3,500 colonies after six days. This milk alkalized by lime gave 14 colonies in the four days and 211 colonies in the six days. After heating for ten minutes in sterilizing flasks at 100°C ., both the original and the alkaline milk were practically sterile, developing from 1 to 4 colonies per drop after four days culture. Raw milk, after heating to 68°C . for an hour, proving to be practically sterile (1 to 2 colonies per drop), the experiment was tried at keeping the temperature at 68°C . for six minutes, when the same result was obtained. On cooling and diffusing the cream which the heating had brought to the surface, the appearance and properties of the milk heated to this temperature in no wise noticeably differed from raw milk."

A difficulty arises in securing the proper amount of heat, if we are to have this degree of sterilization carried on in the household. At my suggestion, Mr. Dyer has made a series of experiments with milk contained in glass flasks and heated in an Arnold sterilizer. Having, at the outset, the water in the sterilizer and the milk in the flasks at ordinary temperatures, placing the sterilizer over a brisk Bunsen gas-burner, it took about twelve minutes for the milk in the flask to reach the temperature of 155° . If, now, the gas be turned out, and the cover of the sterilizer be placed slightly ajar, and the milk left in for another five minutes and then removed to a cool place, all the sterilization necessary will have been effected, and none of the deleterious changes will have taken place.

In feeble infants, when the digestive powers are very weak, Dr. Leeds recommends the combination of peptonization with sterilization, the temperature never being allowed to exceed 68°C . Once the temperature rises over 75°C . changes occur which interfere with the digestibility of even the peptonized milk.

In some families even sterilization as directed above, cannot be obtained, either from ignorance or poverty, and in such cases

the use during the summer months of a good brand of condensed milk may perhaps fulfil the conditions. As the condensation of the milk is conducted *in vacuo*, a temperature above 155°F. is, I understand, never reached. Condensed milk has the disadvantage of being very deficient in the amount of the fats it should contain—the cream being to a great extent removed in the process, to secure an absence of rancidity in the prepared article. If condensed milk is used permanently, this element must be replaced by cream, or, perhaps, cod-liver oil, in the cooler months. In preparing this condensed milk for the infant, water that has been boiled, but that has been allowed to cool to about 155°F., should be used.

In the preparation of cow's milk for the infant, the large excess of the albuminoids which it contains must always be borne in mind; but in simply diluting it, we must remember we increase the already existing deficiency of the fats and sugars. In a city, and especially during hot weather, cream is always a doubtful quantity and generally contains many bacteria, and for these reasons, I think, should rarely be used in infant feeding. The deficiency of the carbo-hydrates may, however, be often advantageously supplied in children, over two or three months of age, by the addition of a prepared flour of one of the cereals. This method has been long a favorite one with Dr. Jacobi and Dr. Lewis Smith. The cereals used have been principally barley, wheat, and oatmeal, and of these my preference is for the barley. It is the blandest and most nutritious, contains the largest amount of the phosphates, and has neither a constipating nor relaxing action on the intestinal canal.

Mr. Dyer has, at my suggestion, prepared a food of pure barley flour, in which the starch granules have been altered by the action of a heat of 212° maintained for five or six days. At the end of this time the flour has assumed a somewhat yellow colour, a slightly sweeter taste, and a not unpleasant cooked odour. He has had the changes in it carefully examined by Dr. Ruttan, who has found that the starch has been partly converted into dextrose and is thus rendered decidedly more soluble in the juices of the infant stomach.

The addition of such a flour as this to cow's milk, either pure or condensed, does to some extent prevent the formation of large curds, and must supply some of the deficiencies produced when we simply dilute the milk. In the young infants, we should advise its use more as a diluent of the milk, but in infants over six months of age, it may form a fair proportion of the food.

RUPTURE OF THE CAPSULE OF BOTH LENSES, WITH OTHER DAMAGE TO THE EYE, FROM PLEURO-PNEUMONIC COUGH.

By CASEY A. WOOD, C.M., M.D.,

Pathologist to the Illinois Eye and Ear Infirmary; Professor of Ophthalmology,
Chicago Post-Graduate Medical School.

Rupture of the capsule of a transparent lens commonly occurs in consequence of a direct injury accompanied by a penetrating wound of the globe, and is often associated with dislocation of the crystalline. It rarely happens under other conditions. When it does, the accident is, as a rule, caused by intra-ocular pressure from tumors and other morbid products within the eye, and is then due to a solution of the capsular continuity. According to Swanzy*, blows with the fist, from champagne and aerated water corks, etc., may rupture the capsule without any wound of the coats of the eye, but such instances are, to say the least, rarely met with. If the force employed be great enough to bring about capsular rupture, it almost always dislocates the contained lens. Dr. Ezra Dyer† observed the eyes of five criminals executed by hanging. Of the ten eyes, only six sustained dislocation of the lens, and the minority rupture of the capsule *in situ*.

Becker‡ relates an interesting case: A man, æt. 20, was chopping wood, a piece of which hit him in the ocular region. Although no trace of a wound of any sort could be found in or about the eye, either at the first examination or during the further progress of the case, a small rupture of the anterior

* Diseases of the Eye, p. 279.

† Trans. Am. Oph. Society, vol. ii, p. 351.

‡ Graefe und Saemisch, Bd. v, S. 276.

capsule was discovered. The lens, in consequence, became cloudy, gradually came forward into the anterior chamber, and underwent a slow absorption there.

Aub* has published the following history: J. H., aged 14; eight days before consultation had been struck with considerable force in the left eye by a piece of wood. Much inflammation resulted, which mostly disappeared on treatment. On examination, the anterior chamber, iris and anterior capsule were found to be normal. There was, however, an opacity at the posterior pole and diffuse vitreous opacity. Atropine was used, after which it was discovered that the post-polar opacity was due to a rupture of the posterior capsule and a commencing cloudiness of the lens fibres about the seat of the trauma. From that time onward the traumatic cataract increased in size, and the swollen lens protruded through the ever-widening rent into the vitreous. Finally the patient became blind, but after several discussions the lenticular mass underwent absorption, the capsular remains were torn apart, and vision equalled fingers at 13 feet. This defective sight resulted from the presence of two choroidal ruptures, involving the macular region.

Arlt† relates a unique case: P. K., æt. 34, large and strong, short-sighted since childhood, became, in September, the subject of retinal detachment, right eye. I saw her in October, when the visual acuity was one-half. Left eye, $V = \frac{1}{16}$. The right lens now gradually became cloudy. In May the family physician was sent for, because, without apparent reason and during the night, sight in the right eye had undergone a decided change. He found the lower half of the anterior chamber filled with cloudy lenticular masses. As these set up considerable irritation (tender globe, pericorneal injection, headache, etc.), a corneal incision was made and the lens matter removed.

In this instance, as there was no sort of injury or shock, one must conclude with the writer that it was a true case of spontaneous rupture of the anterior capsule, although it is possible that the capsular fibres had in some way first become weakened as a result of the retinal disease.

* Archives of Oph. and Otology. Vol. ii. p. 191.

† Bericht über d. oph. Gesell. zu Heidelberg, 1881.

Letenneur* mentions a case where a spontaneous rupture of the anterior capsule occurred, followed by the usual swelling of the lens and its presentation in the anterior chamber. But in this case there had been a concussion cataract ten months before, and there may have been, at that time, some interference (not readily made out by any kind of examination) with the integrity of the capsules.

Bresgen† reports an interesting example—the only one I know of in literature—of bilateral rupture of the anterior lens capsule caused by placing the four-year old patient in a cold bath as a remedy for basilar meningitis. This was on the fifth day of the disease. On the sixth day the eyes were injected, pupils did not react, and there was an irregular rent in both anterior capsules through which masses of cloudy substance protruded. In another week the lens had become so far absorbed that in the depths of the eye a double *choroiditis metastica* (from the meningitis) could be diagnosed. The child survived. The choroidal disease probably weakened the lens capsule and rendered it more liable to rupture from the congestion produced by the bath.

Ulrich's‡ well-known case is as follows: A merchant applied for treatment of a recent, left-sided, non-specific iritis. Cornea and aqueous were cloudy and iris attached by exudation to lens at pupillary border. Atropine and hot applications were applied, and on the fifth day the posterior synechiæ above mentioned had been torn away, but in the lower quadrants they still remained. Two days afterwards the patient said that as he was quietly sitting in a chair, it seemed to him "as if a plaster had been clapped over his left eye." Next day the lens could be seen projecting into the anterior chamber. Tension greatly increased. The lens was subsequently extracted and vision, with glasses, was one-third. Writer thinks that the rupture of the capsule was due to the action of the atropine dragging upon the iritic adhesions, and that the lens suddenly came forward into the anterior chamber without its capsule.

* Archives d'Ophthalmologie. Tome iv, p. 292.

† Graefe's Archiv für Angewandte Ophthalmologie. X, S. 267.

‡ Klin. Monatsbl. für Augenheilkunde, 1882, S. 230.

I am in a position to supplement the foregoing histories by that of another case. I first saw J. O., a dissipated man, æt. 35, in June of last year. Eleven weeks before he had had, according to the statement of his physician, a double pleuro-pneumonia (with high temperature, delirium, etc.) from which he finally recovered so fully that no trace of the attack could be detected in his lungs. In a few days after coughing began he noticed that the vision of his right eye, which previous to his illness had always been good, grew very weak; the lids swelled up, a watery discharge set in, and the eye itself became very red and painful. The pain gradually increased in violence until he was unable to sleep. Two days after this the other eye commenced to pain, and went through an experience similar to the first. When he came under my care the condition of both eyes was much the same and presented the following remarkable picture. Vision was reduced to the perception of shadows; T—2; considerable ciliary injections; very little lid swelling or pain; some ciliary soreness. The corneæ were smooth, flattened and vascular. There was no anterior chamber, or, rather, this space was everywhere occupied by yellowish-white lens matter, through which, in some spots, could be had glimpses of the iris. The latter seemed to be attached all around to the lenticular material. The pupillary space was entirely occluded by opaque, crystalline substance. There was some photophobia and stillicidium. Patient perceives candle light centrally only in right eye, but on the left side projection is fair at one foot. Treatment: blisters to the temples, atropine (1 p.c. solution), and general treatment. In September patient entered hospital and was operated upon there by a very competent surgeon, who attempted to remove through a corneal incision some of the lens matter from the right eye. When I saw him a month afterward there was some blood in the anterior chamber, but in other respects the situation was practically unchanged. On Dec. 30th the eye was quiet. T L—?; T R—1. There is less corneal injection. Nothing daunted by my colleague's failure, I did a preliminary dissection (double needle operation) of the lenticular remains in the right eye, and a few days subsequently succeeded

in removing a considerable amount of disintegrated lens matter through a peripheral incision in the cornea. These operations were repeated in the left eye some weeks later, and on neither occasion was the reaction severe. However, the effect upon vision has not been very encouraging. The opaque mass in the anterior portion of both eyes is made up of toughened lens matter glued to the iris by plastic, inflammatory exudations. I do not think that any operative procedure will give my patient useful vision; the eyes will very likely go on to *phthisis bulborum*.

A careful consideration of this case—the absence of a history of injury and the good projection remaining three months after the loss of vision—makes it highly probable that rupture of both anterior capsules was brought about by the pressure exerted upon them by severe coughing. It was a case of traumatic cataract of the “concussion” variety, and if this be true, it stands almost alone in literature. At least, I have so far been unable to find an account of a similar instance.

SYNOPSIS OF REPORTS OF CASES TREATED WITH TUBERCULIN.*

By J. BRADFORD McCONNELL, M.D.,

Professor of Pathology and Lecturer on Physical Diagnosis, University of Bishop's College, Montreal.

The following six cases were placed on Koch's treatment for tuberculosis shortly after my return from Berlin, about the end of January, 1891. The progress of the cases has been carefully noted, as the accompanying charts and minute reports will show. Four were treated at the Western Hospital and two in a private hospital. All other means tending to build up and fortify the general system, as far as was indicated in each case, were adopted. Most of them used, more or less constantly, an antiseptic inhalation, consisting of terebene, thymol, ol. eucalypti, creosote, and chloroform. Cod-liver oil and cough mixtures were not given; medicines were occasionally given to stimulate the action of the digestive organs. Liquid malt and alcohol in the combination known as egg-nog were occasionally prescribed, and

* Read before the Medico-Chirurgical Society of Montreal.

physical exercise tending to develope and expand the chest was carried out as far as possible. Only three of the cases were such as would be chosen with good hopes of success. I shall only give the briefest outlines of the progress and condition of these cases during the treatment. I have preserved permanently all the slides made, showing the number of bacilli at each microscopical examination, the enumeration being according to Gaffky's scale.

CASE I.—J. B. F., aged 34, widower two and a half years; height, 5 ft. 11½ in.; weight, 133½ lbs.; occupation, lumber merchant. Has weighed 175 lbs. Family history free from phthisis. He married in 1886; his wife suffered at the time from incipient phthisis. He went with her to California in 1887; he attended her and occupied the same apartment until a month before her death in the spring of 1888. A few months before this he began to cough, the sputum being occasionally tinged with blood; the cough remained, with slight improvement at intervals, until last November, when, after exposure, he contracted a pleurisy on the right side; which kept him confined to the house five weeks. Physical examination gave evidence of deposits in both apices, with mucous râles over both supra-spinous regions; diminished respiratory sounds throughout right lung; body emaciated; temperature 2° to 3° above normal; respirations 20 to 24; sputum 2 to 4 oz.; bacilli present in proportion of 7, Gaffky's scale. Half a milligramme of tuberculin was given on Feb. 11th, and continued at intervals of two or three days until the maximum dose of .100 mgms. was reached on 23rd May. The injections did not give rise to any decided reaction, only accentuated the usual daily rise of temperature. Notable increase in amount of sputum. On March 5th the physical signs were more marked; three weeks later râles had disappeared and dullness on percussion less marked, and night sweats only on one or two nights each week. Appetite good throughout; weight remained about the same; temperature after first dose of 100 milligrammes only rose to 100.2°. This quantity was repeated, on alternate days, three or four times, when 102° was registered and the sputum increased to 6 and 7 ozs. An attack of diarrhoea

had a weakening effect. June 8th, highest temperature 101.2°. Physical signs much the same as in the beginning.

<i>Bacilli</i> —Gaffky's scale—February 7	7
“ 19	8
March 8	9
“ 20	8
April 2	9
May 31	8

To continue the treatment.

CASE II.—Miss R., aged 23, single; height, 5 ft. 6 in.; weight, 100½ lbs. (former weight 138 lbs.); lung capacity, 70 cub. in. No cases of phthisis in her family. Menstruation normal. No previous illness. Began coughing in autumn of 1889; had several slight attacks of hæmoptysis, and cough continued during past year. Complains of an irritation in the throat. The apex of left lung gives all the physical signs of infiltration, with a few râles in the subclavicular region. There is also a catarrhal condition of the fauces. Sputum 2 to 4 fl. drachms daily; bacilli 7, Gaffky's scale. Temperature was almost normal during the three or four days previous to first injection of .001 cc., which was given on Feb. 15th, 1891; slight reaction followed in five hours and on the two following days. The dose was gradually increased until the maximum of .1 cc. was reached on Feb. 22nd, which scarcely changed the normal temperature which had existed for some days previously. Two days after the first injection the sputum had increased to 1½ oz.; during March it averaged about 1½ oz. daily; after April 5th it ceased almost entirely, would have to wait for days to get sufficient for microscopic examination, and the cough, which had been less since first injection, also disappeared. Appetite improved from the beginning of the treatment. Complained several times after the injections of a pain at the base of the right lung and a hot feeling in the eyes, and the face became flushed when the temperature went above normal. Had no night sweats; steadily gained in weight, about 1 lb. weekly; and the subjective symptoms of weakness and irritation in the throat and chest gradually disappeared. The cachectic appearance which obtained on entrance was replaced by that of ruddy health.

Patient was discharged from the hospital on the 9th May; weight then 112½ lbs.; the spirometer test gave capacity of 80 without any great effort, a gain of 10 cubic inches; chest measurement had increased 2½ inches, and she had to change her waists in order to breathe comfortably.

Physical examination.—Slight dulness still on percussion over affected area; increased fremitus; broncho-vesicular respiration; no râles. The physical signs indicate a steady return to normal. The injections are being administered weekly still; there was a reaction with last one (2°), given June 19th. With this reaction about two drachms of sputum was coughed up, the first for about two months; there are no bacilli.

June 25.—100 milligrammes; weight 117 lbs. Has coughed some every day since last injection. Appetite not so good since she left hospital. Percussion gives a note of same quality at each apex. Bronchial breathing still in supra-clavicular region, harsh in the infra-clavicular region, and somewhat weaker than right side.

<i>Examinations for bacilli</i> —February 5	.....	7
March 3	.....	7
April 11	.....	6
“ 17	.....	4
“ 26	.....	2
June 2	.....	0
“ 18	.....	0
“ 26	.....	0

In order to be certain that no bacilli existed in the sputum, the whole quantity was treated according to Fenwick's method and allowed to settle two days; none could be found in the sediment.

CASE III.—Mrs. McL., aged 35. Her illness dates from January 1890; began with an attack of la grippe, followed by pleurisy, and later by bronchitis, from which she did not seem to recover. Present weight, 96 lbs.; former, 130 lbs. Lung capacity, 75 cub. in. Respirations 36; pulse 120; temperature 2° to 3° above normal. Night sweats. Marked family history of phthisis; lost five brothers and sisters, and mother. Is very much emaciated. Physical signs of deposits in upper

third of right lung, and less in left, with coarse râles in right. Chest measurements, 14½ in. right side; 13½ in. left. Sputum, 2 drachms; bacilli 6, Gaffky's scale. First injection on Feb. 3rd, ¼ milligramme repeated every second day. Sixth injection, .001 cc.; reactions were not marked. Bronchial respiration more marked after the first three or four doses. Patient's subjective symptoms improved; says she has not felt so well for two years; frequently complained of pain in right apex after the injections. At the end of 1st March the dose was only .002 cc., and was not increased until 15th March. Sputum now varied from ½ to 3 oz., and temperature reached about 102°. Appetite has been unusually good ever since treatment began. Sputum on one or two occasions tinged with blood. She feels a stinging sensation in the nose, and it gets red the day following the injection; eyes are weak, getting painful if she attempts to read. On May 1st weight was 103 lbs, the dose was then .020 cc. Night sweats and cough less. Cavernous respiration in right supra- and subclavicular and supraspinous region. A few mucous clicks opposite 3rd rib. Her general appearance was much improved, face rounding out, and she feels inclined to be occupied, sewing or knitting; she had not been able to do any work for a year back. On June 1st patient got .065 cc.; maximum temperature ranged about 102° each day. Sputum not more than half an ounce daily, and patient claims to be feeling unusually well. Physical signs show improvement in the condition of the lungs; no râles, and the cavernous respiration is changing to bronchial. Maximum dose given on June 23rd increased by ten milligrammes last two injections; patient not feeling so well; stomach deranged; she is getting very anxious to go home. Râles at both apices on front, and marked tubular breathing over supraspinous and right interscapular region; bronchial breathing over left supraspinous.

<i>Examination for Bacilli</i> —	January	28	.....	6
	Febr'y	28	.....	8
	March	19	.....	8
	April	2	.....	7
	May	1	.....	7
	June	1	.....	8
	"	25	.....	8

The progress under the treatment was favourable up to a couple of weeks ago ; the large doses have caused rather much reaction, and there has been loss of appetite, with coated tongue, and she was tired of hospital diet. Undoubtedly her previous good condition would have been maintained had the doses not been increased so rapidly. I will continue the remedy at intervals during the summer. A cavity undoubtedly formed during the course of the treatment, which is evidently closing up.

CASE IV.—Mrs. V., aged 23 ; height, 5 ft. 2 in. ; weight, 130 lbs ; well-nourished ; florid cheeks ; lung capacity 90 cub. in. Father, mother and sister died of consumption. Illness dates from Sept. 1890. Persistent cough ; loss in weight ; digestive organs much deranged. There is tubercular infiltration in the upper third of right lung. For a week previous to beginning treatment the temperature in the afternoons rose two to three degrees above normal. Respirations 20 ; pulse 90 to 100. Sputum 2 oz. ; bacilli 8. The first injection ($\frac{1}{2}$ milligramme) was given on Feb. 3rd ; reaction slight, more marked after third injection of 1 milligramme, and sputum reached 4 oz. Injections were given every fourth day, and kept at two milligrammes throughout the month, temperature rising to about 102° each day. Sputum only 2 oz. Three and four milligrammes brought the temperature to 103°, returned to two milligrammes, and then stopped for two weeks, but temperature remained about the same. Began with two milligrammes again, and increased to 30, temperature still remains the same ; this dose was repeated four or five times, but the temperature remaining high, the dose on the 2nd June was reduced to five. Physical signs at present indicate the formation of a small cavity in right subclavicular region ; mucous clicks in left apex ; tubular breathing as low as 3rd interspace on the right side. The patient has steadily lost weight ; her digestive organs are constantly disordered, and has little appetite. No benefit from the treatment in this case. This is one in which surgical aid would appear to have been indicated, if one could have felt justified in recommending so serious an operation before the left lung

became implicated. Free drainage for the products of the changes taking place might have arrested the high fever which has obtained from the beginning.

<i>Bacilli</i> —January	28	.....	8
February	28	.....	6
March	8	.....	8
“	19	.....	8
“	31	.....	8
April	4	.....	7
May	31	.....	10
June	25	.....	8

CASE V.—T. K., aged 39; height, 5 ft. 10½ in.; weight, 140 lbs.; lung capacity, 140 cub. in. Father and two sisters died of consumption. Nervous temperament. Had syphilis five years ago; had slight attacks of la grippe about Nov. '90, and did not feel quite up to normal after; had slight cough and night sweats. Caught fresh cold first week in January; had dry cough and slight hæmoptysis; lost rapidly in weight and strength. Examination discovered evidence of infiltration in left lung as low as nipple and half way down chest behind. No crepitation; breath sounds scarcely audible. Sputum 6 drachms, very viscid; bacilli 7. Pulse 90; respirations 38, and daily elevation of temperature about 2° above normal. Half a milligramme was given on Feb. 3rd; slight increase in the daily rise of temperature. After the fourth dose of 1 milligramme was given the temperature was 101½°; pulse 100; respirations 36. Has had chills every afternoon since he first became ill; they are now more marked. Complained of headache after the injections, during the following day. Sputum 1½ oz, and brought up more easily. At the end of March, two months after beginning the treatment, the dose was only 2 milligrammes, temperature rising daily to about 102°. Had one attack of hæmoptysis; lasted two days. Physical signs were the same, except some fine crepitation over left suprascapular region. Appetite usually good. At the end of April got 7½ milligrammes, and daily temperature was 1° less. Patient was feeling well, all the symptoms improving, and physical signs showed less dullness on percussion; sputum, ½ oz.; weight 143 lbs. The next dose, unintentionally, was 20 mgms.;

temperature rose next day to 102° , and for three weeks continued to rise to from 102° to 103° ; chills and cough became worse, and complained of pain in left lung, over lower third, and about waist, chiefly due to excessive coughing; crepitant râles over upper third of left lung and a friction sound at base behind. Lying on left side brings on cough. Symptoms gradually improved, temperature not rising above 100° , so that on 29th May injections were resumed; began with 2 milligrammes; these have been gradually increased to 15 milligrammes on the 25th June. Patient has returned to his usual duties, the reaction is slight (averaging 100°); no chills, and he is gaining what he lost during last month. He is being congratulated by his friends on the general improvement in his appearance and capabilities; has very little cough, except during the day following the injections. Sputum about $\frac{1}{2}$ oz. daily.

June 25th.—Weight, 133 $\frac{1}{2}$ lbs.; cap. 140. Physical signs: dullness throughout upper third of left lung; increased vocal fremitus and resonance; breathing almost inaudible during ordinary respiration; no râles. The stationary condition of the lung, with little tendency to disintegration of lung tissue and improvement in the general symptoms, indicate a resolution of the disease similar to what is sometimes seen under favorable climatic treatment.

<i>Bacilli</i> —January	28	.....	7
Feb'y	19	.....	8
March	8	.....	7
“	19	.....	6
April	2	.....	7
May	30	.....	6

CASE VI—Was one of advanced phthisis in a young lady, both lungs and the larynx being implicated. Fifteen doses were given of from a half to two milligrammes. The cough was rendered less distressing, but the fatal result was only hastened by the use of tuberculin. Its application was acquiesced in more to satisfy friends who were anxious to have everything tried that might be of use to her than with any expectation of a favorable result being obtained.

We can gather from these cases that *tuberculin* has a specific

action upon tuberculous tissue, tending more or less rapidly towards its degeneration or disintegration. That in a mild case, where the progress is slow, it can bring about a speedy resolution of the disease. That better results are most likely to follow where the remedy is given in small doses and is not pushed too rapidly, and only slight local reaction aimed at. That it is very necessary to keep the patient under the best possible conditions favorable to health in order to aid the remedy in arresting the tuberculous process. That when constant high temperature follows, only minimum doses should be employed, or stop the remedy until it does not rise above, say, 100°. That even in advanced cases, decided improvement follows in some instances. That where the tendency of the disease is towards rapid progress, the remedy will only hasten the disintegration of the affected tissues and the fatal result. That we get favorable results from tuberculin when aided by the usual general treatment of pulmonary tuberculosis far exceeding that from any treatment hitherto employed, but much has yet to be learned in regard to the methods of employing the remedy to the best advantage, and as to the proper time when its action may be supplemented with advantage by surgical treatment of the affected lungs.

Retrospect Department.

QUARTERLY RETROSPECT OF GYNÆCOLOGY.

BY T. JOHNSON-ALLOWAY, M.D.,
Instructor in Gynecology, McGill University Montreal.

(Continued from page 67.)

Painful Menstruation.—DR. CHAMPNEYS concluded his Harveian Lectures on Painful Menstruation with a consideration of the symptoms, causes and treatment of spasmodic dysmenorrhœa. This he believed to be the only real dysmenorrhœa; it was also called neuralgic, obstructive, and mechanical dysmenorrhœa. It was essentially primary. The pain typically preceded the flow, and was relieved by it; it was situated in the womb, and intermitted or varied. It usually lasted from twenty-four to forty-eight hours, and differed in intensity. The flow was scanty, and the symptoms got worse with time. Marriage did not relieve it unless pregnancy and delivery ensued. Dr. Champneys summarized the mechanical theory of the causation of this variety of dysmenorrhœa under the heads of flexion, stenosis, and chronic congestion produced by flexion; and he then proceeded to show that this theory was inadequate. The evidence usually produced in favor of flexion as a cause was (a) difficulty in passing the sound; (b) evidence derived from specimens of flexed uteri; (c) the illustration of bent tubes. The evidence of stenosis was (a) congenital stenosis with "pinhole os"; (b) swelling of the uterine mucous membrane; (c) fibroids; (d) polypi; (e) contortion of the cervical canal from hypertrophy; (f) increased flow of blood. Dr. Champneys then discussed the question as to whether flexions were essentially associated with dysmenorrhœa, and quoted the statistics compiled by Professor Vedeler in Stockholm and Dr. Herman in London.

Hæmatocele and Hæmatoma.—VEIT, in a paper on this subject (*Med. Anzeiger zum Centralblatt f. die ges. Medicin*, 1890) read before the last International Medical Congress, contends for a more exact diagnosis between intra- and extra-peritoneal hemorrhage. An effusion of blood within the healthy peritoneal

cavity never becomes encysted ; if the bleeding ceases, the blood is absorbed ; if it continues, death results. In order that a true hæmatocele may be formed, either the effused blood must be encapsulated or slow bleeding must occur into a cavity already formed by adhesions, as is usually the case in extra-uterine gestation. The diagnosis of free hemorrhage into the peritoneal cavity rests upon the presence of the usual signs of profound anæmia, and not on physical signs, since nothing pathological can be palpated ; the differential diagnosis between hæmatocele and hæmatoma, on the other hand, is not usually difficult, as a tumor is always felt. When the former condition is suspected the abdomen must be opened at once. Landau, in discussing this paper, denied that the recognition of a considerable quantity of free blood within the peritoneal cavity was difficult ; dullness of the abdomen on percussion would give a clue to this condition. While it was true that blood effused within the normal peritoneal cavity did not coagulate, and consequently tended to become absorbed so long as it was in contact with living epithelium, coagulation would take place as soon as the epithelial layer was destroyed at any point ; this might occur from the irritation caused by the stagnating blood itself. As soon as coagulation took place, the formation of pseudo-membranes and encapsulation would follow.

Metrorrhagia : Should Thirst be Quenched ?—Dr. JORISSENNE (*Archives de Tocologie*, Jan. 1891) combats the principle of allowing plenty of drinking water to patients exhausted by flooding, whether after labor or in fibroid disease. The practice is advocated on physical and therapeutic grounds. Yet its defenders admit that there is diminution of the plasticity of the blood in these cases, and administer steel and other remedies in order to increase that plasticity. The absorption of enormous quantities of water into the circulation must have the opposite effect. Dr. Jorissenne maintains that the patient should not be permitted to drink freely. Slices of sugared lemon or acidulated drops should be administered in order to quench thirst. The patient, he adds, should be kept in the recumbent posture, with the arms raised ; from time to time ammonia may be inhaled. This treat-

ment is especially advisable in women subject to deficiency of colored blood corpuscles. Eighteen years ago Dr. Jorissenne tried his line of treatment on a woman of 53, who was dying from hemorrhage after abortion at the third month. She was a stout, anæmic multipara, of violent temper. There was difficulty in removing the placenta, and both plugging and astringent intra-uterine injections failed to check the bleeding. The patient fell into a desperate condition. Dr. Jorissenne noticed that she was continually drinking tumblerfuls of cold water. Considering that the source of hemorrhage was being fed, he strictly forbade all drinks, raised the arms, rubbed the lips with vinegar and lime-juice, gave the patient ammonia to inhale, and plugged the uterus again. No drink was allowed for three hours. The patient then rallied and recovered, and is now alive, a healthy old woman. He was successful in two other cases of flooding; one after abortion, between the second and third month; the second after a lingering labor, mismanaged by an ignorant midwife. These cases were less serious than that above described, but Dr. Jorissenne was able to commence his treatment much earlier. He admits that in very plethoric patients this dry treatment of flooding might be harmful if too rigidly enforced.

The Vaginal Operation in Extra-Uterine Pregnancy.—

Dr. CHRISTIAN FENGER presented a paper upon this subject at the December meeting of the Chicago Gynæcological Society, in which he reviews the literature of the subject and endeavours to show the indications for the advisability of the vaginal operation in its relation to laparotomy for the same condition. The vaginal operation, he says, is to be considered only when the sac or foetus is located so deeply in the retro-uterine fossa that it pushes the walls of this region outward so as to form a prominent tumor in the posterior wall of the vagina, provided the position of the foetus renders extraction possible without turning or laceration of the tissues. As to the frequency of such location of the foetal sac as to render this form of operation advisable, he concludes that it occurs in about ten per cent. of the cases of extra-uterine pregnancy. As to the *prognosis* of the operation, he says that the statistics show that the mortality presented

nearly fifty per cent. as compared with the mortality of laparotomy, which is seventeen per cent., but believes that the mortality may be lowered by the observance of strict antiseptic precautions, which was not carried out in all the cases included in the above statistics. Of the *dangers* of the vaginal operations he mentions (1) hemorrhage, which is always difficult to control owing to the limited field for securing bleeding vessels. Severe hemorrhage was noted in four out of fourteen cases, causing death in two reported by Rupin and Tate. He believes that in view of this danger it is advisable to leave the placenta as far as possible undisturbed to come away by spontaneous detachment. In four of these operations done soon after rupture of the sac, reported by Simpson, Lewers and Goelet, with four recoveries, there was severe hemorrhage in two cases, of Simpson and Lewers. In one case the hemorrhage was caused by attempt at removal of the placenta, but in two cases the placenta was removed without hemorrhage; (2) the danger of sepsis resulting from retention of the placenta; (3) the difficulty of removing the child through the vaginal opening at or near full term. When the foetal sac has been transformed by suppuration into an abscess cavity, the treatment has the same indication and prognosis as in abscess cavities of other origin in the pelvis. In cases of this character he believes the vaginal operation is preferable to laparotomy, and cites eleven cases reported by Herman where there were nine recoveries and only two deaths. As to vaginal operation early in pregnancy, it is uniformly condemned by all authorities; but Herman has collected six cases, to which may be added one reported by Bernays, making seven in all. Three of these cases were operated upon before rupture of the foetal sac, with two recoveries and one death; four were operated upon at the time of or soon after rupture, all of which recovered. Although the mortality of these cases was only fourteen per cent., dangerous sepsis, requiring frequent antiseptic irrigation, occurred in five out of the seven reported by Thomas, Harrison, O'Hara, Goelet, and Bernays, in one of which (O'Hara's) fatal peritonitis occurred. In regard to this operation he draws the following conclusions:

(1) In cases where the foetal cavity is still aseptic, the vaginal operation exposes the patient to danger of sepsis in the foetal sac, which cannot be guarded against. Abdominal section gives far better means of protection against septic infection.

(2) Hemorrhage from the placenta cannot be controlled by the vaginal operation. By abdominal section, on the other hand, ligation of the internal spermatic and uterine arteries, as devised by Olshausen, can be accomplished as a means of checking hemorrhage from the site of a removed placenta in the territory supplied by these vessels. Abdominal section further permits of ligature *en masse* of the bleeding portions when the placenta has been divided at the place of incision.

(3) Delivery of the child at full term is usually difficult, and thus dangerous to the mother, by the vaginal operation, but easy by the abdominal operation.

(4) If the fate of the child is to be considered, the vaginal operation must be abandoned and replaced by abdominal section.

(5) When suppuration has set in in an extra uterine pregnancy presenting low down in the small pelvis, and the placental circulation has ceased, the vaginal operation may be considered in comparison with the abdominal operation.

(6) The vaginal operation is strongly indicated in old suppurating foetal sacs, with disintegrated foetus presenting in the vagina.

Final remarks.—The vaginal operation is condemned by a number of modern authors, among whom may be mentioned Werth, Olshausen, Lawson Tait, Thornton, and others. At the Gynæcological Congress at Freiburg in June, 1889, Olshausen condemned the vaginal operation, as well as drainage into the vagina after laparotomy in such cases. As an advocate of the vaginal operation Landau stands isolated. He stated that he had performed thirteen vaginal operations and lost only one mother. As his cases have not been published in detail, this material is not available for consideration here, and can have no influence on the conclusions above stated.

The Treatment and Curability of Carcinoma Uteri.—In a paper with this title (*München med. Wochenschrift*, 1890,

Nos. 42 and 43) Hofmeier questions if the introduction of total extirpation of the uterus for cancer of the cervix has proved to be a decided advantage in the treatment of the disease. In support of his position he cites the statistics of different German operators, showing that Kaltentbach reports 30 per cent. of his patients free from recurrence one year after operation, Martin 41 per cent., Olshausen 47.5 per cent. at the end of two years, and Schauta 47.3 per cent. He criticises the statistics of the Munich clinic—64.4 per cent. without recurrence two years after operation—since they are the same as those claimed by Leopold in 1887. Attention is called to the slight favor with which total extirpation is regarded in England and America as compared with its popularity in France and Russia. The results obtained by Byrne by the use of the galvano-cautery (77 per cent. cured at the end of two years), and the combined results of Schröder's operation at the hands of Pawlik and the writer, are also alluded to. The statistics of high amputation by Schröder and Hofmeier (42.2 per cent. free from recurrences after two years) corresponds closely with those of total extirpation, and therefore show that the radical offers no decided advantage over the partial operation. In both classes of cases it appears that nearly 50 per cent. of the patients in whom the diagnosis was made in the incipient stage of the disease were well two years after operation. The writer next discusses the question whether it is a fact that the upper segment of the cervix is affected in cases of commencing epithelioma of the portio vaginalis. If this were true total extirpation would invariably be indicated, but, in his opinion, this has not been satisfactorily proved anatomically.

Treatment of Dysmenorrhœa.—Prof. H. MARION-SIMS, while lecturing on obstructive dysmenorrhœa, said: If it be due to stenosis, the cervix will be found perfectly straight; the canal straight, but the mouth of the womb will be narrowed and the os small. The flow is then impeded by the narrowness of the canal. In the treatment of this condition he does not trust to the use of dilators alone to widen the canal, but combines division of the cervix with dilatation of the canal. He overcomes the

resistance of the os internum with one swoop of the knife, which the dilator will accomplish only after a long time. Besides being the quickest, it is also the most humane procedure from the patient's standpoint, because she experiences no pain from the operation, being etherized. In the operation for simple stenosis of the cervix, take the urethrotome, make a small incision on the right side of the cervix and then another similar incision on the left side, till the sound passes into the uterine cavity with absolute freedom. Then taking the dilator (Sims's dilator is the most practical one of all), introduce it, and dilate until the calibre of the cervical canal is about equal to half an inch or so; then introduce the rubber stem to keep the canal open, leaving it in position for from six to seven days. The operation is not a bloody one in any sense, and is entirely free from risk.—(*Practice.*)

Gonorrhœal Salpingitis.—Dr. TERILLON states that gonorrhœal salpingitis presents three modes of invasion. (1) Acute vaginitis, followed by endometritis, and finally by salpingitis; (2) mild vaginitis, sudden development of pelvic peritonitis, the early symptoms of salpingitis; (3) absence of vaginitis, uterine and tubal gonorrhœa. The first two varieties are due to infection with the virus of an active gonorrhœa; the third variety to the virus of an old or latent gonorrhœa. Salpingitis, according to the statistics of Fournier, occurs in one-fifth of all cases of gonorrhœa in the female. When the disease is limited to the mucous membrane of the tubes, and but little pus is formed, the prognosis is favorable. At the menopause all symptoms generally disappear. It must be remembered, however, that even in this relatively benign form, life may be endangered at any moment by the sudden development of peritonitis. But suppuration, with encystment, is more frequent than this simple catarrh. The pus sac may rupture either into the uterus or into the rectum, or, far more frequently, into the peritoneum, provoking a fatal peritonitis. A similar peritonitis may develop before any accumulation of pus in the tubes, from mere extension. In non-encysted cases a small quantity of pus may escape from the tube, producing a local peritonitis with the formation of false

membranes, which constitute a protective envelope. This may rupture at some point with a similar result, and, so on, even fifteen or twenty times, as Terillon has observed, constituting a relapsing peritonitis. Gonorrhœal salpingitis is nearly always double, and consequently entails sterility.—(*Bull. Médical.*)

Indications for Laparotomy.—Prof. CHROBAK of Vienna said (*Med. Press*), in a long paper, that these were very different according to the social condition of the patient. As a general rule, however, when strength was enfeebled, the patient unable to work, and life a burden, laparotomy should be performed. In ovarian cysts the operation was indicated as soon as the diagnosis was confirmed. Longer delay endangered the patient; inflammation, torsion of the pedicle, rupture of the cysts, etc., might occur with serious consequences. In malignant ovarian swellings we are often forced to operate, owing, unhappily, to difficulty of diagnosis. He recognizes the fixing of the sheathes in the lower pole of the swelling to be a sure sign of malignant growth. It is important to determine, before operating, if the tumor can be removed entire or in part. The implication of the bowel is the common difficulty, and is the most perplexing to decide. Myoma are suitable cases for laparotomy, as they are rapid in their growth, with hemorrhage not always checked easily, while the pain usually embitters life. Besides, these tumors usually cause a good deal of disturbance in neighboring parts; inducing inflammation, cystic degeneration, ascites, aneurism of uterine arteries, etc. Chrobak enumerates cystic degeneration, new growths, special tubo-ovarian cysts, tubercle of tubes, pyo-salpinx in connection with the uterine appendages, where laparotomy is imperative. In other cases where operative measures are not necessary, he recommends the use of potas. iodide, ichthyol, uterine dilatation, tamponing, massage and electricity.

Hospital Reports.

MONTREAL GENERAL HOSPITAL.

CONDENSED REPORTS OF SURGICAL CASES UNDER THE CARE OF DR. RODDICK.

(Reported by DR. R. E. McKECHNIE, House Surgeon.)

CASE I.—*Scirrhus Mammæ*; Operation.

M. M., female, single, aged 61. Her general health had been good, and the menopause had been passed ten years previously. There had never been a case of cancer among her relatives, her mother, aged 80, being still living. Eleven months previously, lancinating pains began to be felt in the left breast, and a month later a small nodule was noticed, which has grown to be a mass, 3 inches by $2\frac{1}{2}$ inches, attacking the nipple and causing its retraction. The tumor was removed by the ordinary elliptical incision prolonged into the axilla, which latter was cleared of enlarged glands.

The method of procedure in this case was that adopted by Professor Bergmann, of Berlin, and other German surgeons. Before operating, the surface of the skin over and in the neighborhood of the tumor was thoroughly cleansed by scrubbing with antiseptic soap and hot water, and then washed with 1 in 2000 sublimate solution. During the operation no irrigation was allowed, the exposed surfaces being kept dry with pads of gauze, sterilized by dry heat; also, after the operation no irrigation was practiced, the surrounding skin being cleansed with wet towels and the surfaces exposed by the operation dried with sterilized gauze. Arteries were secured with catgut and the wound closed by catgut sutures. The only drain was a small one of catgut in the axillary end of the wound. No antiseptic powder was dusted over the wound, the parts being dressed merely with sterilized gauze.

In this case a very good result was obtained. The temperature remained normal throughout, and the note in the case-book shows that thirteen days after the operation the wound had united perfectly throughout its whole length, no gaping or sinus existing.

CASE II.—*Scirrhus Mammæ ; Operation.*

B. M., female, single, aged 27. Her previous health had been fairly good. Family history revealed a tuberculous tendency, but no record of cancer. Patient had noticed a lump in her breast for about two years, but paid no attention to it till six months ago, when it began to enlarge, and nipping pains were experienced in it. At the time of operation the tumor was about three inches in diameter, freely moveable, not retracting the nipple. It was removed by the ordinary elliptical incision prolonged into the axilla, the whole breast, with nipple, and some enlarged axillary glands being removed.

The same procedure was adopted in this case as in the former, irrigation being abandoned as soon as the operation began, and sterilized gauze used to dry the surfaces. The wound was closed by alternate silk and catgut sutures, and small tents of gauze were inserted at either extremity of the wound for drainage. The whole was then dressed with sterilized gauze and a rubber dressing.

The subsequent history of the case is, that at no time was there a sign of retention of discharges in the wound. The edges united by first intention, and the patient was discharged from hospital fourteen days after the operation, the wound being perfectly healed, with the exception of a small button of granulation tissue (no sinus) at either end of the wound, where the drainage tents had been.

CASE III.—*Epithelioma of Lower Jaw and Floor of Mouth ;
Excision of Bone and anterior two thirds of Tongue.*

M. B., female, aged 59. Patient's general health previous to the present complaint had been fair; the menopause occurred nine years previously. There is no history of cancer obtainable in the family. Three years ago the patient had had a plaster cast taken of the floor of the mouth for a set of false teeth. On removing the plaster, a piece of the mucous membrane, the size of a five-cent piece, was pulled off, just behind the middle lower incisors. The ulcer thus formed never healed. The present growth has only been noticed the past ten months,

and started from the site of this ulcer. Considerable pain has been experienced the past year.

On examination, a hard mass was found inside the lower jaw, attached to it, and extending from near the right canine tooth to the left wisdom tooth. No tributary glands were found involved. The tongue could be partly protruded, and, with the exception of the frænum, did not seem involved. An operation having been decided on, a horseshoe incision was begun opposite the lobe of the left ear, extended across the submaxillary region, and up through the centre of the lower lip. The lower jaw was sawn through, a little to the right of the symphysis, and removed by dividing the left ramus. The anterior two-thirds of the tongue with the floor of the mouth was also removed with the knife. Drainage was provided for through the floor of the mouth. Afterwards the cavity of the mouth was irrigated every four hours with a warm saturated solution of boracic acid, and the patient's strength kept up by nutrient enemata, every four hours, of pancreatized milk and whiskey. Convalescence was interrupted by an intercurrent attack of pneumonia, but, notwithstanding this, she was able to be sent home, over 200 miles away, in six weeks. For about ten days before being discharged she made attempts at talking, and, latterly, was able to make herself fairly well understood, despite the loss of two-thirds of the tongue.

CASE IV.—*Cancer of the Rectum; Colotomy; Recovery.*

H. M., male, aged 41. This patient was admitted to hospital in an extreme degree of prostration. For several months he had been suffering with an increasing difficulty in defæcation, accompanied by rapid emaciation. On examination, he was found miserably weak and exceedingly thin. The pulse varied from 120 to 130, and was irregular in both volume and rhythm. The abdomen was distended and tense, and much pain was complained of. There was complete occlusion of the rectum, by a hard, irregular, unyielding mass, evidently malignant, the examining finger being stopped about three inches above the anus. No fæces or even gas had passed for two days. Nothing

but a palliative operation could be thought of in the patient's extremely weak condition. Accordingly a left lumbar colotomy was rapidly performed, with but little loss of blood, the patient being only a short time under ether. A large quantity of semi-fluid fæces, with gas, was evacuated. The patient rallied from the operation, took nourishment well, and felt immediate relief. But on the fourth day pneumonia of the right base set in, considerably delaying convalescence. However, four weeks from the operation he had sufficiently recovered from the previous weakness and from the effects of the subsequent pneumonia to be discharged from the hospital. At the present date, three and a half months after the operation, he is feeling well, is strong enough to walk about, and the artificial anus is doing its duty satisfactorily. A recent examination of the mass shows that it has shrunk considerably since the operation, and with the exception of a little mucus occasionally, there is no discharge.

SURGICAL CASES UNDER THE CARE OF DR. SHEPHERD.

(Reported by DR. W. S. MORROW, House Surgeon.)

CASE I.—*Excision of Tongue, Floor of Mouth, and Right Tonsil, with preliminary Ligature of the Linguals; Recovery.*

Mrs. M. G., aged 58, admitted April 30th, 1891, with a growth on the right side of her tongue.

History—In February, 1890, patient noticed a small, hard lump on the right side of her tongue, which she ascribed to a sharp tooth. In August of the same year, as it was increasing in size, she consulted a doctor, who gave her caustic to use. The disease steadily advanced, but she persevered in the use of caustics until March, 1891.

Present condition—Patient is a spare woman, and believes she has lost considerable flesh during the progress of the disease. Her skin is somewhat loose; eyes bright; appetite moderate; bowels regular; disposition cheerful and hopeful; heart slightly displaced downwards, otherwise seems normal; lungs and kidneys normal. The right side of the tongue is occupied by a

large ulcer with an indurated base extending from the tip to near the root. The floor of the mouth, on the right side, is also involved in the disease. The glands are enlarged and hard along the anterior border of the right sterno-mastoid.

May 6th.—*Operation*—Chloroform was at first administered, but the respirations became exceedingly weak, and ether was substituted. Breathing was good during the rest of the operation. After the usual cleansing of the seat of operation, the lingual artery on each side was tied by the usual curved incision extending from near the symphysis menti to the angle of the jaw, the convexity of the curve reaching to the hyoid bone. Through the right incision the enlarged glands before mentioned were removed. A gag was now put in the mouth and the whole tongue removed with scissors, with little hemorrhage. The floor of the mouth, the tonsil, and the submaxillary gland on the right side were found infiltrated, and removed through the incisions on that side of the neck. Oozing was stopped with Liq. Ferri Perchlor., 1-4. A large drainage tube was passed into the mouth through the wound on the right side, and a smaller one inserted in the wound on the left side. The mouth was swabbed out with iodoform paint and the external wounds dressed with iodoform. After the operation, the mouth was swabbed out with iodoform paint every day and irrigated with weak Condy's fluid every four hours until wounds were healed.

Patient was fed by enemata for four days, and after that by a gum elastic catheter passed into the oesophagus. She sat up in bed as soon as she was taken there, and was kept propped up night and day. On the fifth day she got up on a chair. On the sixth day the sutures were removed and also the tube leading into the mouth. On the ninth day the right ear became red and swollen, as well as the skin in its immediate neighborhood. Equal parts of alcohol and carbolic lotion (1-20) was applied. On the eleventh day the temperature reached $103\frac{1}{2}^{\circ}$; no cough; no fœtor of breath; wound granulating nicely.

Fifteenth day—The redness and swelling have spread to forehead since last note, but now it looks paler in tint. Patient has been trying to drink without the catheter, but has not succeeded.

Nineteenth day—Ear is still a little red and swollen, but is much better than it was. Lead lotion ordered. Patient feels much better, and is out on the verandah. Floor of mouth healing nicely.

Twenty-ninth day—Patient discharged to-day. She has steadily increased in strength for past week. Wound on left side is quite healed; on the right side there is still a communication between the neck and mouth. She still has to use the œsophageal catheter.

Remarks.—In this case the operation was an unusually severe one, owing to the extent of the disease. The elevation of temperature was evidently due to a mild form of erysipelas which attacked the face, and which at the time was prevalent in the city, some cases having occurred in the ward a short time previously. The facility with which the involved glands, tonsil and floor of the mouth were removed through the neck incision is worthy of note.

CASE II.—*Excision of the whole Tongue by Whitehead's method; Recovery.*

S. W., male, aged 65, married, admitted May 25th, 1891, with a growth in his tongue.

History—About the 1st of March patient noticed some induration on the left side of his tongue. Since then it has been steadily and rapidly increasing. It has never caused him much pain. He comes of a long-lived family in which he never knew of a tumor. Is a farmer by occupation. Never uses liquor to excess, and does not smoke, but chews tobacco.

Condition on admission—Patient is a wiry-looking old man, who says he has lost flesh lately, and is now rather spare. Heart, lungs and kidneys normal. The growth is raised above the surface of the tongue and indurated; it extends on the left side from the tip to the anterior pillar of the fauces. In front it reaches the middle line; behind, it does not extend so far in. The glands at the angle of the jaw on the left side are enlarged.

May 30th.—Patient was etherised and the whole tongue excised with scissors according to Whitehead's method. After

the vessels had been tied, the raw surface was painted over with the styptic iodoform paint recommended by Whitehead. The patient's mouth was swabbed out every day with the paint, and irrigated every four hours with diluted Condy's fluid till the wounds were healed. He was fed by enemata till the third day. From that time he was able to swallow liquids without any oesophageal tube. He was kept propped up in bed from the first, and on the third day got up on a chair for a while. At the end of a week he was going about as usual. The enlarged glands had entirely disappeared.

Thirteen days after the operation he left hospital with his mouth granulating nicely. He could talk intelligibly and take nourishment well. During the whole course of his stay in hospital his temperature never rose above 100°F.

Remarks.—In this operation, the method recommended by Whitehead was strictly followed, and with the best results. The lingual arteries were easily secured, for after the frenum, the anterior pillars of the fauces and the mucous membrane were cut, the operation was practically external. The operation proper took only seven minutes. The advantage of letting the patient up early was seen in this case. Whitehead's operation is admirably adapted to those cases where the tongue alone is involved in the disease.

Reviews and Notices of Books.

Text-Book of Ophthalmoscopy. By EDWD. G. LORING, M.D. Edited by FRANCIS B. LORING, M.D. Part II — Diseases of the Retina, Optic Nerve and Choroid: their Varieties and Complications. New York: D. Appleton & Co. 1891.

This is an elegant volume of two hundred and fifty-three pages, copiously illustrated in the text, besides some fifteen beautiful colored chromo-lithographic ophthalmoscopic sketches. The first volume of this work appeared some years ago. The talented author, Dr. Edward G. Loring, still a young man, was then in the prime of his active and useful career, which, to the great loss of his profession, terminated by his sudden death in April 1888. But in this work on ophthalmoscopy he has left a monument of which his country may well be proud, for there is no other work of the kind at all to be compared with this. The second volume was so nearly complete in manuscript at the time of his demise that the editor of part II determined "to publish it as it stood, without addition or correction." The concluding chapter, on "Affections of the Choroid," may, however, perhaps be said to lack the finish and elaboration otherwise characteristic of the work throughout. Doubtless most ophthalmologists are familiar with vol. I, and it is quite certain that none can afford to leave unexplored the rich mine of detail contained in vol. II. The author was not only a minute observer but a faithful delineator, and gifted, moreover, with the rare faculty of close and accurate description; thus it happens that the many years devoted to this work have given it a stamp of originality now rarely met with in medical publications. The illustrations are for the most part from original sketches by the author, and would no doubt have been more numerous had he been spared to complete the work himself. It must not, however, be understood from this that there are any palpable defects that might have been remedied by the author had he lived to complete it. On the contrary, it must be conceded that the science of ophthal-

mology owes more than gratitude to the editor, Dr. Francis B. Loring, for his great services in giving to the world the completion of this great work in its eminently satisfactory shape.

Sexual Neurasthenia (Nervous Exhaustion): Its Hygiene, Causes, Symptoms and Treatment. With a chapter on Diet for the Nervous. By GEORGE M. BEARD, A.M., M.D., formerly Lecturer on Nervous Diseases in the University of the City of New York, etc. (Posthumous manuscript.) Edited by A. D. ROCKWELL, A.M., M.D., Professor of Electro-Therapeutics in the New York Post-Graduate Medical School and Hospital. Third edition, with formulas. New York: E. B. Treat. 1891.

To the late Dr. Beard belongs the chief credit of placing the entire subject of so-called nervous exhaustion on an intelligent basis. In the work under consideration, attention is solely directed to that special clinical variety of neurasthenia known as sexual neurasthenia, as it occurs in the male sex. The work of the late author and the present editor in this particular field is too well known to require any special notice here. It is sufficient to say that there is no work in any language that deals with this important subject in such a complete manner.

Koch's Remedy in Relation Especially to Throat Consumption. By LENNOX BROWNE, F.R.C.S. Edin. Illustrated by thirty-one cases and by fifty original engravings and diagrams. Philadelphia: Lea Bros. & Co, 1891.

One of the unfortunate results of the introduction of a new remedy to the medical profession is the flooding of the medical literature with reports of cases which have been under observation for a comparatively short time, and the deductions from such cases as to the value of the remedy under consideration must necessarily be worthless. In the work before us we have such an example. It is to be noticed that the cases in Berlin, as reported in this book, were only examined by the author between the 1st and 5th December, many of them only having been seen once, whilst those under the author's own care are

reported after observation varying in time from nine to twenty-seven days. Deductions of no value can thus be drawn as to the usefulness of Koch's remedy in laryngeal tuberculosis from such imperfectly observed cases. The clinical history and histological features of laryngeal tuberculosis are well described.

A Hand-Book of the Diseases of the Eye and their Treatment. By HENRY R. SWANZY, A.M., M.B., F.R.C.S.L., Surgeon to the National Eye and Ear Infirmary; Ophthalmic Surgeon to the Adelaide Hospital, Dublin, etc. Third edition, with illustrations. London: H. K. Lewis. 1890.

The sale of the entire second edition of this work in a little over a year shows well the appreciation in which it is held by the profession. The present edition is thoroughly brought up to date. The chapter devoted to the value of certain eye-symptoms in the localization of focal cerebral disease has received much more attention than in either of the previous editions. It is a chapter prepared evidently with the greatest care, and is proof of the ability and thoroughness of the distinguished editor. The work, as a whole, may be confidently recommended to both students and practitioners as in every way representing modern ophthalmology. The publishers have performed their part, as they always do, giving us a work that is pleasant and easy to read.

Collected Contributions on Digestion and Diet. By SIR WILLIAM ROBERTS, M.D., F.R.S., formerly Physician to the Manchester Royal Infirmary, and Professor of Medicine in the Victoria University. Philadelphia: Lea Brothers & Co. 1891.

The profession are to be congratulated in being able now to read, in a collected form, the various admirable essays published at different times by Sir William Roberts on matters relating to digestion and diet. This volume contains the Lumleian lectures "On the Digestive Ferments and Artificially Digested Food," delivered before the Royal College of Physicians in 1880, and

a course of five lectures "On Dietetics and Dyspepsia," given at the Owens College in 1885; papers "On the Therapeutics of Starch Digestion," "On the Estimation of the Amyolytic and Proteolytic Activity of Pancreatic Extracts"; and addresses "On Feeding the Sick," "On the Use of Gastric Antacids," and "On Some Practical Points in Dietetics." It will be seen that they cover a wide range of subjects connected with digestion, and it is hardly necessary to add that they are treated in a most able manner.

Familiar Forms of Nervous Disease. By M. ALLEN STARR, M.D., Ph.D., Professor of Diseases of the Mind and Nervous System, College of Physicians and Surgeons, New York. With illustrations, diagrams and charts. New York: William Wood & Co. 1890.

This valuable contribution to neurological literature deals chiefly with the localization of cerebral and spinal disease, the first eleven chapters being devoted to these subjects. Chapters XIII, XIV and XV, dealing with the paralyses of infancy, multiple neuritis, and paralysis agitans, are fully, clearly, and ably dealt with. Judging from chapter XXII, which is devoted to the prescriptions in use in the nervous department of the Vanderbilt clinic, modern pharmacology is not cultivated with the same ardor as neurology. Many of the prescriptions, in a second edition, would be better left out. The work in every other respect is a worthy production, and reflects credit on editor and publisher.

A Compend of Diseases of Children. Especially adapted for the Use of Medical Students. By MARCUS P. HATFIELD, A.M., M.D. Philadelphia: P. Blakiston, Son & Co. 1890.

This little work, of most convenient size for the pocket, forms one of a series of quiz-compend published by Messrs. Blakiston. The author tells us it is founded upon the excellent "*Compendium der Kinderkrankheiten*" of Dr. Ernst Korma, but other authors have been freely drawn upon. We can easily imagine

these works to be of much service to junior students while attending hospital. The facts are clearly and tersely expressed under the distinctive headings of Definition, Occurrence, Etiology, Pathology, Symptoms, Prognosis and Treatment. Of its class, this work appears to be one of the best.

Origin, Purpose and Destiny of Man, or Philosophy of the Three Ethers. By WILLIAM THORNTON.
Boston: Published by the Author. 1891.

We are informed in the preface that the present work is a continuation of the author's "Rationalism in Medicine," and that this book is an elaboration of the former, which was a mere summary. We do not know the former, but if it were more concentrated than this, it must have been better adapted for some other sort of intelligences than for human beings.

It has been thought by many that the practice of medicine tends to make those who engage in it too materialistic. Against such tendencies this book must prove a valuable antidote to all who can grasp, if only faintly, its meaning—and that is all we can pretend to do ourselves. Everything depends on whether the food can be digested or not. It is rather too much for our own stomach, but possibly it may be different with others. The book may contain treasures of truths, but for not a few mortals it is sealed, whether happily or unhappily the reviewer sayeth not.

The Comparative Climatology of London and the Chief English Health Resorts. By BERTRAM THORNTON, M.R.C.S. & L.R.C.P., Lond. London: H. K. Lewis. 1891.

This is a small brochure, reprinted from an article which appeared in the *Lancet* of last year. It gives the daily range of temperature and amount of rain-fall at the various English watering-places, enabling a comparison to be made between them. Its interest will be confined in great part to English readers.

Influenza. Von Prof. Dr. DRASCHE, Ober-Sanitätsrath in Wien. Wien: Verlag von Moritz Perles. I. Seiler-gasse 4 (Graben). 1890.

This is an excellent brochure on Influenza, in its many phases. The subject is dealt with by the distinguished author in a thoroughly scientific spirit. The complications and protean sequelæ are fully considered. We have much pleasure in recommending the work to the notice of our readers.

Illustrated Lectures on Nursing and Hygiene. By R. LAWTON ROBERTS, M.D. (Lond.), D.P.H. (Cambridge), Member of the Royal College of Surgeons, England. With illustrations. London: H. K. Lewis. 1890.

Of many recent hand-books on nursing, Dr. Roberts' is, in our opinion, the best. It deals with the subject fully and clearly. It is enriched by numerous well-executed illustrations.

Society Proceedings.

BATHURST AND RIDEAU MEDICAL ASSOCIATION.

The eighteenth annual meeting of this Association took place at Gananoque on the 15th July.

The morning session was devoted to general business and the address of the president, Dr. A. F. Rogers of Ottawa.

DR. ROGERS reviewed the work done by the Ontario Medical Council and the recent changes in the Medical Act and curriculum of studies for the province. At its conclusion a unanimous vote of thanks was passed to Dr. Rogers for the work he had done as the representative of this district in the Council.

Resolutions of condolence were also passed on the deaths of Dr. Lavell of Smith's Falls and Dr. Potter of North Gower.

In the afternoon the following papers were read and discussed :—

Placenta Prævia.....	Dr. A. G. Allan, Gananoque.
Dislocation of Cervical Vertebra.....	
Obstruction of Bowel by Gall-stones..	Dr. R. H. Preston, Newboro'.
Acute Peritonitis followed by Intes- tinal Obstruction.....	Dr. Jos. Lane, Mallorytown.
Hermaphrodism	Dr. J. S. Atkinson, Gananoque.
Hereditary Predisposition of Nervous Disease	Dr. M. A. McFarlane, Ashton.
Medical Evidence.....	Dr. R. Mack, Ottawa.
Pyloric Stenosis.....	Dr. Emery, Gananoque.

A dinner at the Provincial House and an excursion through the Thousand Islands tendered by the members resident in Gananoque brought a very successful meeting to a close.

The following officers were elected for the ensuing year :

President—Dr. A. F. Rogers, Ottawa.

Vice-Presidents—Dr. T. H. Drumble, Gananoque ; Dr. A. A. Henderson, Ottawa.

Treasurer—Dr. H. Hill, Ottawa.

Secretary—Dr. H. B. Small, Ottawa.

Council—Dr. A. Crane, Smith's Falls ; Dr. S. Cornell, Athens ; Dr. A. W. Dwyre, Westport ; Dr. F. Hanna, Perth ; Dr. J. A. McCallum, Gananoque ; Dr. D. H. Rogers, Gananoque ; Dr. H. P. Wright, Ottawa ; Dr. A. J. Horsey, Ottawa ; Dr. P. A. McDougall, Ottawa.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 29th, 1891.

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

Epileptiform Convulsions.—DR. J. A. SPRINGLE read the following clinical report: R. M., aged 12, had always been a healthy and active boy till August, 1888, when he developed peculiar convulsive seizures, somewhat maniacal, which were believed to have been produced by an undue exposure to the heat of the sun. He suffered from severe frontal headache, lasting, as a rule, for two days every second week. Four months later the fits changed in character. They now became like those of epilepsy, during which there were tonic and clonic spasms and complete loss of consciousness. They numbered from ten to twenty in the twenty-four hours, and each lasted for a few seconds. His condition gradually grew worse, and when first seen by Dr. Springle in October, 1889, he had had as many as fifty-seven fits in the twenty-four hours. Notes of the case taken at the time were as follows: Boy, aged 12, well-nourished, appears restless and idiotic; is very destructive and mischievous; is unable to concentrate his attention, and will not answer questions put to him. He has no delusions or hallucinations. He is unable to sleep and complains of pain in forehead. There are associated movements of the left eye and the lower jaw. The pupils are equal and active. The urine is passed involuntarily and the bowels are very constipated. There was no marked improvement in the patient up to May 1890. The fits were almost as numerous, and he appeared to be getting more and more stupid and listless from day to day. He had had long courses of bromides, the constipation had been attended to, and at times morphia had been given; all these, however, produced but slight benefit. Dr. S. then decided to try the iodides, and gave ten grains potassium iodide daily. Improvement was observed in a week, and after a month's treatment he was free from the fits.

DR. BIRKETT had seen the patient with Dr. Buller. The

associated movements of the left eye with the lower jaw were interesting. This condition was extremely rare, but seven cases were on record. The ophthalmoscopic examination was negative. He thought the symptom merely a coincidence in the present case.

DR. F. W. CAMPBELL asked if a record of the fits had been kept, as it was important to know how much the iodide had improved the patient. In the treatment of epilepsy he had found nitroglycerine, of one per cent. solution, beginning with one drop, most satisfactory. He thought it advisable in Dr. Springle's case to push the iodide.

DR. PROUDFOOT had related a case last year before the Canada Medical Association, of a patient the subject of a calcareous cataract who had developed epilepsy. The eye had been excised and the patient had since been free from epileptic attacks.

DR. SPRINGLE remarked that the boy had been under treatment for two months. He was now free from fits and headaches, and was able to go to school.

Stated Meeting, 12th June, 1891.

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

Cystic Ovary.—DR. G. E. ARMSTRONG exhibited this specimen, which he had removed from a patient aged 35. She had had an attack of severe abdominal pain on the 27th of May last, which was followed by other and more severe attacks on the 28th and 29th. The pain was of a tearing and bearing-down character, and was followed by syncope. On examination, a mass was felt at the left of the uterus, which, considering the severity of her symptoms, he decided to remove. On cutting down, he found nothing to account for the severe pain. A small cystic ovary was found, containing about two ounces of a clear serum. There were no adhesions, no twisting of the pedicle, and no rupture of the cyst.

Ruptured Tubal Pregnancy.—This specimen, also exhibited by Dr. Armstrong, was from a patient of Dr. Allen, whom he

had seen in consultation. She was a young married woman, the subject of uterine pains for the past three years. The attacks were severe, and recurred every four or six months. Menstruation had been irregular. Her last menstrual period had occurred four weeks previously, and had been accompanied by severe pain. On examination, a large fluctuating mass was felt to the right of the uterus. The patient appeared very ill. Her pulse was rapid and she was very tender, which rendered the examination somewhat difficult. Dr. Armstrong, from the history of the previous symptoms, had thought the case probably one of pyosalpinx. On opening the abdominal cavity, dark, recently-formed blood-clot welled up into the wound. The tube on the right side was found considerably enlarged and bleeding; this, as well as the ovary, was removed. It proved to be a case of tubal pregnancy which had ruptured between the fimbriated opening and showed the fully developed chorion. A drawing of the specimen, made by Dr. Springle shortly after its removal, gave a clear idea of the specimen in its recent state.

DR. FINLEY had noticed the corpus luteum in the specimen exhibited unusually large. Dwelling upon this, he remarked that it had been found extremely difficult to distinguish, in every case, the corpus luteum of pregnancy from that of menstruation.

Tuberculosis of the Kidney and of the Bladder.—DR. FINLEY exhibited these specimens for Dr. Roddick. The right kidney showed extensive tubercular disease, involving the cortical portion, which had undergone cheesy degeneration. The ureter and bladder had become secondarily affected. It was interesting to note, around the orifice of the right ureter, in the bladder, small tubercular ulcers, produced, as Dr. Finley believed, by the urine from the diseased kidney.

DR. SHEPHERD had seen the patient when first admitted to the hospital. He then complained of frequent and painful micturition. There was no pus in the urine. He had sounded the patient for stone, but nothing was found. Later on, pus appeared in the urine, which, on examination, was found to contain tubercle bacilli. Dr. Shepherd concluded from this and other cases that frequent and painful micturition were early and frequently the only symptoms of tuberculosis of the kidney.

Atrophia Papillæ Pylorum.—DR. T. D. REED related the case of a man, 35 years of age, who found that in spots, on his face, the hairs were readily extracted, and without the usual sensation of pain. This condition had existed for two years. It was accompanied by some itchiness. Microscopic examination showed the hair-roots atrophied. Nothing abnormal was found on the skin. The individual was in perfect health; syphilis could be excluded. Parasiticides had been used without result. New spots were appearing. The condition was apparently a tropho-neurosis. Some of the defective hairs, showing pointed and curved ends, were exhibited under a one-inch objective.

Infants' Foods.—DR. A. D. BLACKADER read an interesting paper on infants' foods. (See page 81.)

DR. RUTTAN stated that he had been consulted regarding the length of time required to convert barley flour into a more digestible form of food, and also regarding the nature of the change that had occurred. He made a number of experiments, the results of which may be briefly summarized as follows: Barley flour heated to 212°F. for 96 hours was much more easily converted into dextrose by boiling with dilute acids than was the original flour. This change was still more marked when the flour was heated for 144 hours; but if the heating be continued for 24 hours longer, the product became much darker and contained considerable maltose and a caramel-like body, giving it a bitter flavour. Experiments in the artificial digestion of the various products showed that the flour, after 144 hours heating, was very quickly converted into dextrose by an amylolytic ferment; 27 per cent. of the flour so treated was converted into dextrose in fifteen minutes, while but a trace of sugar was formed from the original flour in a parallel experiment. The analysis of the product at the end of 144 hours was made; the starch was nearly all changed into a form of dextrin—part, however, was in the form of amylin and a small part was apparently unchanged. Dr. Ruttan, in the course of his remarks, said he was unable to make out exactly what form of dextrin was produced; it was not ordinary British gum alone, but probably a mixture of soluble starch and some of the intermediate products formed as

dextrin passes into maltose and dextrose. Ordinary British gum, such as is used on postage stamps, etc., had never been thought of as an article of food, yet it clearly resembled the chief constituent of flour prepared in this way. This method of preparing flour for infant's food has long been followed in a crude way by mothers and matrons of infants' asylums. They simply tied the flour in a bag and kept it in boiling water for several days, the result being a similar product to that analysed, but, of course, the conditions necessary to the production of a similar result could not be controlled. One of the great advantages connected with this mode of preparing flour was the coagulation of the albuminoid constituents in a finely granular state.

Discussion.—DR. PROUDFOOT congratulated the reader of the paper. He could corroborate Dr. Blackader's remarks upon the benefit that children obtained from condensed milk when other milk disagreed. He asked if he advised any particular brand of condensed milk?

DR. SHEPHERD inquired if Dr. Blackader had had any experience with goat's milk?

DR. BLACKADER, in his reply, said that it was difficult to get a child to use goat's milk on account of its disagreeable odor; besides, he did not think its use more advantageous to the child than cow's milk. As regards condensed milk, the Anglo-Swiss had apparently given more satisfaction.

Stated Meeting, 26th June, 1891.

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

Neuroma.—DR. MCCONNELL exhibited this specimen, which he had removed from a married woman. It was situated at the back of the leg, where it could be easily felt beneath the skin. It had been the cause of considerable pain, particularly during pregnancy, and frequently preventing sleep. Section of the growth showed it to be composed of dense fibrous tissue growing from the perineurium. No nerve fibres were found in it. The patient had since been free from pain.

Secondary Cancer of the Liver and Vertebrae—Painless Paraplegia.—The specimens were exhibited by DR. FINLEY for Dr. Geo. Ross. The history of the case, furnished by Dr. Spier, is as follows: Maggie C., aged 50, was operated on for scirrhus of the left breast about October 1890. The tumor had been first noticed eighteen months previous to this. In March 1891 she was again admitted to the hospital for pain in the right side, about the 10th and 11th ribs, and passing round to the spinal column. This pain was persistent, of only moderate severity, increased by movements, but never radiating to the legs or round the trunk. The woman was also anæmic, sallow, and weak. About May 12th the liver was noticed to be enlarged and nodular, and about this time she began to have some gastric disturbances, vomiting, nausea, and pain after eating, but no jaundice. On June 7th, paresis and œdema of both lower extremities came on, but there was never any pain, nor was the paralysis complete. There was no retention or incontinence of urine or fæces. Although the vertebrae were repeatedly examined, there was never found to be any tenderness, except over the last lumbar, and this was only slight.

Autopsy, June 22nd.—Body is moderately emaciated. There is a large scar over the site of the left breast, which has been removed, and some secondary nodules are present in it. The liver is somewhat enlarged, weighing 2050 grammes, and its substance is studded with a number of white nodules, the largest being $1\frac{1}{2}$ inches diameter. The centres of many of the superficial nodules are markedly depressed. A few small nodules, not larger than a pea, are seen lying under the visceral layer of the pleura. Several ribs show nodular swelling, and are softened by infiltration of cancerous tissue. The vertebrae were removed from the front from the last lumbar to the third dorsal, and their bodies, pedicles, and laminæ are found infiltrated by a yellowish, firm growth, the bone being softened to such an extent as to be readily torn through or cut by a stout knife. There is a nodule at the level of the last dorsal vertebra, an inch in diameter, adherent on one side to the lamina of the vertebra, and on the other to the dura mater, narrowing the lumen of the

vertebral canal. The cord itself is firm and not flattened, and after hardening in Müller's fluid presents no signs of secondary degeneration. Microscopic examination showed the growth to be scirrhus.

The chief interest in the case centres in the paraplegia being of a painless nature, as such cases are usually accompanied by severe pain shooting along the course of the nerves. The duration of the case, as far as can be ascertained from its onset, was about two years and two months.

Traumatic Aneurism.—DR. SHEPHERD exhibited a portion of the radial artery which showed a small punctured wound, the result of a stab. The patient had had the injury attended to in the country. A week later a pulsating tumour had appeared at the bend of the elbow, which his medical attendant had tried to cure by compression. When he entered the hospital it was about the size of the two fists, and fitted the whole of the space below the bend of the elbow. Dr. Shepherd opened the sac and turned out the blood-clot and a thick layer of fibrin; beneath this was noticed a small hole, which on further dissection proved to be in the radial artery, which was ligatured above and below and the injured portion removed.

Vesical Calculus.—This specimen was also shown by DR. SHEPHERD. The patient, a man, 52 years of age, had come to the hospital to be treated for an old stricture. He complained of frequent micturition unaccompanied by pain or hemorrhage. On passing a catheter the stone was discovered, which Dr. Shepherd subsequently removed by the lateral operation, as the patient had also an enlarged prostate. As the bladder was nearly always empty, he believed the calculus may have been retained in a sacculation of the bladder, which may account for the feeble symptoms of stone present in this case.

Report of Cases Treated with Tuberculin.—This paper, read by DR. J. B. McCONNELL before the Society, will be found in another part of the JOURNAL.

Discussion.—DR. F. W. CAMPBELL, referring to the second case in Dr. McConnell's report, remarked that he had examined the patient and had found his report of the condition of the

lungs coincided with Dr. McConnell's. He had, since the treatment was commenced, followed the case from day to day and found considerable improvement—the dulness on the left apex had entirely disappeared and the breathing seemed almost natural. The patient's appearance was improved and she was now able to do household work.

DR. BULLER remarked that in the May number of *Zehinder's Klinische Monatsblätter* a case of tubercular disease of the conjunctiva treated by tuberculin is reported. Before commencing the treatment measures were taken to establish the tubercular nature of the conjunctival affection beyond all doubt. The reaction, both local and general, under increasing doses, was very considerable, and the former was displayed not only in the conjunctiva but in some enlarged glands near the ear; the latter suppurated and were eventually opened and scraped away, the wounds thus made healing completely. The conjunctival disease also apparently disappeared after about six weeks' treatment. Two or three weeks after the supposed cure another course of injections was instituted, producing severe constitutional, but no local reaction, and the patient was discharged apparently cured. Some weeks later, however, the conjunctival disease reappeared in its old form, and one of the scars where glands had been removed also became affected. The patient would not submit to another course of injections. Tubercular affections of the eye are, on the whole, very rare, and only a few have been so far treated with tuberculin, and the results, as far as I can ascertain up to the present time, have not been encouraging.

DR. SHEPHERD said that in surgical cases the results had been *nil*. There was no case of permanent cure.

DR. HUTCHINSON asked if cod-liver oil, generous diet, etc., had been given in conjunction with tuberculin in the treatment of the cases?

DR. EVANS wished to know if the cases had been under observation for some time before the treatment was begun?

DR. MCCONNELL answered that the patients had been under observation, and that everything possible had been done besides the use of tuberculin in the treatment. He believed one case cured.

The Bacteriological Examination of Diphtheria.—DR. WYATT JOHNSTON read a lengthy and interesting report on his investigations of the Klebs-Löffler bacillus in diphtheritic membrane. This important contribution will appear next month.

DR. ARMSTRONG asked Dr. Johnston if he knew anything of the mode of spreading of the Löffler bacillus? Whether the secretions could be disinfected and so lessen the danger of contagion?

DR. JOHNSTON replied that the spreading of the bacillus was not definitely known. It was very readily acted on by most disinfectants. He did not think that the toxicity of diphtheria depended upon the amount of bacilli.

Selections.

Arsenic in Disease.—In a lecture delivered by Jonathan Hutchinson (*Brit. Med. Journal*, June 6, 1891) in the London Post-Graduate Course, he reaches the following conclusions as to the remedial value of arsenic:—

In pemphigus it is almost an universal specific. We can speak with more positiveness as to its efficacy in this form of skin disease than in any other.

In common psoriasis the effect of arsenic is quite definite and certain, though not so immediately curative as in pemphigus. It requires to be pushed, and seldom brings about a complete cure without re-enforcement by efficient local measures.

In eruptions of the eczematous type we must speak with great caution as to the efficacy of arsenic. If given in anything like full doses in such cases it usually irritates and makes the eruption worse. In minute doses it probably has little influence either way.

In acne, sycosis (non-parasitic), and various other chronic affections of the skin, the custom is to give arsenic, but Mr. Hutchinson leaves the impression that he thinks it has little efficacy in such diseases.

He does not think that it produces its effects in skin diseases by its tonic properties, as these all depend on the smallness of

the dose. When it is pushed it nearly always produces distaste for it, languor, and feeling of ill-health. In elderly persons he does not advise it if it can possibly be avoided, especially if there are symptoms of nerve degeneration present. Paralysis agitans, in his experience, is made worse by it. He thinks it is also an undoubted cause of peripheral neuritis in some cases where it is pushed. In some cases he has known it to induce herpes zoster when given for the cure of other diseases. It not infrequently causes local numbness, especially in the lower extremities, with numbness and tingling in the soles of the feet. In small doses its continuous use is not probably injurious, further than its tendency to cause zoster, even when taken for years. In a general way its effects are not usually beneficial, and when at all pushed patients are glad to quit it, and feel languid and depressed under its use, and sometimes show emaciation. It is not without danger, and numbness and tingling in the palms and soles, decided loss of flesh, irritation of the conjunctiva, diarrhœa, irritability of the bladder, etc., are indications that its use should be discontinued. One remarkable fact regarding the use of arsenic is its preventive influence over certain affections, recurrent zoster not reappearing while it is used, as well as that form which appears on the genitals, lips or mouth, and which recurs frequently. In conclusion, he sums up its influence as follows: It rapidly cures psoriasis, pemphigus and their allies, prevents the return of recurrent herpes and other relapsing maladies, sometimes causes zoster and several types of peripheral neuritis, has an affinity for nerve tissue, and some peculiar influence over nerve function.—*Lancet-Clinic*.

Post-Mortem Cæsarian Section.—Dr. T. A. O'Callaghan (*N. Y. Medical Record*, May 2, 1891) reports the case of a multipara, aged 36, who was sinking from cancer of the stomach during the twenty-eighth week of pregnancy. She had been kept partially under the influence of morphine for many weeks. In her moments of consciousness she said that she felt the movements of the child, and, being a Catholic, desired earnestly that it should receive the rite of baptism. Dr.

O'Callaghan reached the patient about twenty minutes before her death. Her husband and a priest told him that they had promised the patient, who was now unconscious, that he (the doctor) would make an effort to save the child. Dr. O'Callaghan could not hear the foetal heart. The patient died, and a few seconds later an incision was made from the umbilicus to the pubes. The uterus was thus at once exposed. It was in a state of contraction, and on careful opening with a scalpel the waters gushed out. Guided by his fingers, he laid the uterus open as far as the abdominal parietes. A small living foetus was thus extracted without difficulty; it cried feebly. The cord was tied and divided. The internal os was tightly closed; the placenta attached to the left side. The uterus continued its contractions as strongly as after a normal birth, and was soon reduced to the size of the double fist, pressing out every drop of water and a considerable quantity of clotted blood. The pylorus was the seat of cancer, which was diffused over the mesentery and intestines. The child—a weak, puny little thing, of not fully seven months uterine age—was baptized and lived three hours.—*Cincinnati Lancet-Clinic*.

Ideals of Medical Education.—Let us consider briefly an ideal of a medical education of a higher type. In addition to the incipient family practitioner of ordinary qualifications—the beginners in the profession—there is need of, and employment for, highly skilled, thoroughly trained physicians and surgeons as family physicians, as consultants, as specialists, and as investigators and teachers. There are two ways in which these needed men may be educated and developed. The first is by their commencing with the ordinary course of instruction for general practice, and then going on, after graduation and commencing practice, to study and perfect themselves in details—according to individual tastes and opportunities; and this has been the course pursued by a large number of our most distinguished American consultants and specialists. The other is to lay a broad and sound foundation of preliminary education before giving any attention to clinical study or practice. This means

an education at least equivalent to that required of candidates for the degree of Bachelor of Arts from our leading universities, including Latin, French and German, and mathematics to include trigonometry and the elements of analytics. It should also include one year's work in a physical laboratory, two years' work in chemistry, two years' work in biology, at least one year's work in practical anatomy, and one year's course in materia medica. In other words, it requires that the youth of sixteen, having obtained a good high-school education, shall go on to spend at least five years in additional study before he commences to see anything of practice. He should then spend at least three years more in special medical and clinical studies, during one year of which he should, if possible, reside in a hospital. If, then, his purpose is to become a specialist, an original investigator and a teacher, it is desirable that he should spend two years more in clinics and laboratories devoted to his special subject—and at least half of this time should, at present, be spent abroad.

These are the broad outlines of what I suppose most physicians of the present day would consider a desirable scheme of medical education for an intelligent boy with a fair amount of liking for study, good health, and sufficient means to enable him to go through with it without making undue demands upon his parents or guardians.

You will observe that there are several qualifying clauses in that last sentence. The aphorism that it does not pay to give a five-thousand dollar education to a five-dollar boy, must be constantly borne in mind in considering these questions. On the other hand, it is also to be noted that in the preparation of educational schemes, it is not necessary to provide for the demands of youths of extraordinary ability and industry—for men of genius. Beds suitable for giants are not required as part of the stock of an ordinary furniture store, especially if it require giants to make them. Some cases of disease will recover without treatment, though the cure may be hastened by proper management; some will die under any treatment; the result of some depends on the treatment. It is much the same in education. Some will acquire knowledge and power without special

training ; others will never acquire these things under any training ; but the career of many depends, to a large extent, on the training which they receive. The recent announcement of a compulsory four years' course of medical studies by Harvard and the University of Pennsylvania, soon to be followed by a similar announcement from Columbia, looks toward the ideal just indicated.—*Ext. from Dr. Billings' Yale Address, in Boston Med. and Surg. Journal.*

Errors to be Avoided in Cæsarian Section.—Dr. Howard Kelly (*Amer. Jour. of Obstetrics*) says : Do not use antiseptic solutions for instruments or hands after the operation has begun ; above all, do not use them in the abdominal cavity. Use pure water throughout, preferably distilled, which has been boiled a half-hour. Do not turn the uterus out of the abdomen before delivering the child, unless its contents are doubtfully septic ; it does no good, adding an unnecessary step and calling for a larger abdominal incision. Do not cut the placental tissue, thus bleeding the child, in placenta prævia Cæsariana. Do not waste time picking off small shreds of decidua from the inner surface of the uterus. Do not do a conservative Cæsarian operation when the uterus is already septic ; if the uterus is infected, do a supra-vaginal amputation after Porro's method. Do not use catgut of any kind as a uterine suture ; it has proved dangerous and uncertain. Never use a continuous suture in the uterus. Do not attempt to drain the abdominal cavity ; it cannot be done effectually. Do not douche out the vagina, as a matter of routine, after the operation ; it must be carefully disinfected beforehand ; afterwards an aseptic genital tract will need no active antiseptic regimen. Lastly, let all the preparations be so fully and carefully made beforehand that no time shall be lost, and each successive step shall follow its predecessor with the utmost rapidity consistent with accuracy, and the whole be completed with despatch.

I have thus endeavored to insist that a certain simple, rational *technique*, now shown by abundant experience to contain all the factors of success, shall be universally adopted. I must insist

that my countrymen, in particular, shall cease making useless experiments, unwittingly repeating over and over again the errors of their predecessors. No man has any longer a right, unless upon the basis of a large experience, to materially modify any details of this operation, if he be unwilling to bear the imputation of unwarrantable trifling with the most sacred trusts committed to his care.—*American Lancet.*

A Warning About the Forceps.—In a recent clinical lecture Dr. Goodell said to his class: “Let me warn you, as young men, to resist the temptation of keeping the forceps on too long, in your undue haste or excitement to deliver the woman. Make it your rule to take them off when the head is well down and the perinæum begins to bulge, unless the pains have stopped or the woman is in puerperal convulsions, or she is in any condition demanding prompt delivery. By observing this precept you will at least avoid the accusation that ‘the doctor tore her with his instruments’; for indeed it is too true that the physician, in his haste to deliver, does often tear his patient either by a too hasty delivery or by pulling parallel with the long axis of the woman’s body, instead of following the curve of Carus.”—*Practice.*

The Results of the Removal of the Uterine Appendages.—Dr. Keppler, at the Tenth International Medical Congress, gave the after history of eighteen cases, which he had followed up and carefully studied. In each of the patients the operation had been done for gross diseases of the sexual organs, such as pyosalpinx, salpingitis, oöphoritis, uterine myoma—and never for psychosis or neurosis. Both tubes and ovaries were always removed. The therapeutic effects were good, the patients in all cases being relieved of their symptoms. The anatomico-physiological results were likewise uniformly good. In no case did a typical menstrual hemorrhage occur after the operation. The countenances of the women remarkably changed, and the women became quieter and more beautiful (!). In all cases the conjugate diameter of the pelvis

became shorter, this effect being more pronounced in the younger patients; the shortening amounted to two to three centimetres. The vagina became shorter and narrower, the mucosa thinner, smoother, and paler. The cervix became shorter, the uterus smaller, the introitus vaginæ narrower. The breasts became smaller and the nipples paler. The tendency to become stouter which has been described by other operators was not observed in any case. The sexual instinct was always preserved. Three patients, virginal before operation, married later and lived in happy wedlock. The passions persisted, particularly when the operation was performed early on young persons. In myoma the results of the operation were good both as regards the hæmorrhage and the shrinking of the tumor.—*Birmingham Medical Review.*

The Virile Reflex.—Dr. C. H. Hughes refers to a new diagnostic reflex present in all healthy men whom he has examined. The individual is placed in a supine horizontal position, the skin of the penis is then made tense by grasping the prepuce near the frænum with the left thumb and index finger, and drawing it firmly toward the umbilicus, the remaining digits of that hand being placed low down on the dorsum of the organ for perceptive purposes. If now the side or back of the penis near the perineal extremity is quickly percussed, a quick and very perceptible retraction of the bulbo-cavernous portion is noted. The "penis-percussion reflex" is feeble or absent in children under the age of puberty; it becomes impaired or abolished after prolonged excessive venery. It is not impaired in masturbation when the habit has not destroyed the sexual power, but excessive onanism long continued and accompanied by neurasthenia diminishes the reflex. In old men who have lost virility the sign is absent.—*Alienist and Neurologist.*

Nephrectomy for Ruptured Kidney.—

Dr. Obalinski reports (*Sam. klin. Vortrage*, No. 16, 1891) a case in which he removed a ruptured kidney with good results. The patient, aged 32, fell from his horse on September 21st.

The injury was followed by shock great tenderness, and bruising over the right lumbar region, and there was intermittent hæmaturia. On the ninth day there appeared in the right hypochondrium a circumscribed and fluctuating tumor as large as a child's head. As the tumor increased in size there was general disturbance, but no symptoms of suppuration. On October 23rd the injured kidney was exposed by the lumbar extraperitoneal operation. The organ was found to be completely broken across and surrounded by a sac containing a quantity of pure urine, clear and healthy, with a few blood-clots. The ruptured organ was removed, the pedicle and vessels ligatured, and the wound packed with iodoform gauze. The patient made a rapid recovery, being completely cured on the twentieth day. Dr. Obalinski has found reported six other cases of the operation; three successful and three fatal.—*Occidental Med. Times.*

The Extraction of Broken Needles.—

All who have had much to do with this minor operation know how frequently a satisfactory result fails to be obtained unless the indications for a safe operative procedure are strictly observed. It is most unpleasant, after cutting and probing with the finger and forceps, to be obliged to tell a patient who has endured some pain and much discomfort that further attempts are useless, and that the fragment is still there; and perhaps suggest as the best consolation that the needle has a more free opening by which to work its way out. Dr. Steele, in the *Lancet* for May 9, 1891, states that for many years past he has declined to cut, in an attempt for removal of a needle, unless he could make out the situation of a point, and that the other end had a firm bearing to rest upon; giving the assurance that patience and watching are the proper treatment for the time being. Lately, he writes, he has adopted a very simple, painless and reliable plan. The first case in which he employed it was in that of a young woman who had broken a needle into her left heel, and for three weeks had gone about using her right foot naturally, but resting only on the toes of her left foot. The slightest touch gave her great pain. The point of entrance

was visible in the middle line of the tuberosities of the os calcis ; the end of the fragment could be recognized through the skin, but the slightest pressure made it recede. Dr. Steele declined to operate, but directed that two thick corn-plasters, one on the other, should be applied, with the puncture occupying the central hole, and that she should walk freely and bear well upon the heel. This she did with perfect ease, and after ten days the needle presented and was withdrawn. It was the eye-end, and almost an inch long.

Soon after this Dr. Steele writes that he saw a little girl, aged 3 years, who had also trodden upon a needle which broke and entered between the ends of the metatarsal and tarsal bones. A surgeon saw her promptly, cut down, and tried for some time to extract the fragment, but failed. She often felt no inconvenience, but at intervals limped suddenly and complained of pain. She was persuaded to wear a corn-plaster, and after three weeks the portion of the needle, which had been in more than three months, after producing a little superficial irritation, showed itself, and her nurse drew it out. So, also, the wrist and ball of the thumb are not unfrequently punctured, and if the fragment enters obliquely, or lies close to arteries or nerves, and cannot be forced into prominence, attempts at extraction are, to say the least, undesirable ; whereas, by adopting this simple method, after the manner of removing a thorn with the pipe of a key, and producing pressure with an elastic wristlet or slight steel spring, like a small truss, the fragment will work out and not give pain from any knocks while under the skin. In that awkward position, the soft parts by the sides of the ligamentum patellæ, this plan may be used. It recommends itself to every one's common sense, and has the great advantage of not leaving a cicatrix.—*Therapeutic Gazette.*

Treatment of Chronic Constipation.—

Dr. T. Flotau recommends for this purpose the direct application to the rectal mucosa of about three grammes of powdered boric acid. In cases where the mucosa cannot be reached, insufflation of the same quantity of powder is employed. In from half an

hour to three hours after the application peristalsis occurs, attended with copious faecal evacuations. The evacuations may occur two or three times during the day, and are never painful. This method never fails in properly selected cases. Experiments made with other remedies yielded negative results. There is no fear of intoxication, as indicated by a large number of cases treated. In three cases failing to yield to other remedies, boric acid accomplished the desired result.—*Berlin. klin. Wochen.*, March 2, 1891; *Occid. Med. Times*.

Naphthalin in Typhoid Fever.—Dr. L. Wolff reports (*Philadelphia Medical News*, May 23rd, 1891) the results obtained by the use of naphthalin in 100 consecutive cases of typhoid fever under his care in the German Hospital of Philadelphia during an epidemic of that disease in 1889. The cases were all treated in the following way: On admission, calomel with soda was administered in grain doses every three hours for six hours, or until its laxative effect forbade its further use. This was immediately followed by gelatine capsules containing five grains of purified and finely-powdered naphthalin every four hours, alternated with only a few drops of dilute hydrochloric acid. No other medication was permitted, excepting chemical antipyretics and cold sponging for hyperpyrexia. The diet consisted of milk, alternating with meat broths containing raw eggs; stimulants were administered as required. Of the 100 patients, 56 were males and 44 females; their average age was 24.7 years, and the mean duration of the febrile period was 24.4 days. Sixteen cases ran an abortive course, defervescing before the end of the second week. Only three of the patients had intestinal hemorrhage; in two of these the complication occurred shortly after the naphthalin treatment was begun. The total mortality was 10 per cent., but two cases were brought in comatose and never rallied, dying within three days after admission; four others died with complications such as glosso-pharyngeal paralysis (1), acute pulmonary phthisis (1), facial erysipelas (1), and heart failure owing to valvular lesion (1); while of the remaining four fatal cases, two died

within four and five days respectively after admission. Dr. Wolff argues from these facts that the true mortality of the cases under the naphthalin treatment was 2 per cent. He does not think that the total death-rate from typhoid fever in general hospitals will ever be reduced much below 10 per cent., "as severe cases admitted late in the disease, or with complications which no longer admit of treatment at their homes, will under any treatment prove more or less fatal." The statistics of the German Hospital of Philadelphia, for the five years previous to the epidemic during which Dr. Wolff made the observations above referred to, show that the death-rate from typhoid fever was 23.4 per cent. in 1884, 11.4 per cent. in 1886, 20.4 per cent. in 1886, 17.4 per cent. in 1887, and 13.2 per cent. in 1888. His death-rate (10 per cent.) compares very favourably with these; and not less so with the death-rate in different methods of treatment given by Liebermeister of Basle, as follows: On the indifferent plan, 27.3 per cent.; incomplete antipyretic treatment, 16.2 per cent.; complete antipyretic treatment, 10.2 per cent.; no specific treatment, 28.7 per cent.; calomel treatment, 12.4 per cent.; iodine treatment, 12.9 per cent. Dr. Wolff found that, though naphthalin had no direct influence on the febrile temperature, its continued administration speedily produced lysis, and thereupon the temperature became normal. If, however, the medication was discontinued directly on deservescence, it rose again. In nine of the earlier cases relapses occurred, in some of them two and even three times. The naphthalin was then continued for some time after complete deservescence, and the frequency of relapses was greatly diminished. In only one case had the treatment to be interrupted on account of nausea and vomiting, but even in that case it was subsequently resumed without further trouble. The drug controlled diarrhoea so completely that, after its continued use, laxatives were sometimes required. The appetite was not affected by it, nor was any irritation of the uropoietic apparatus observed under its use. The heart was not injuriously depressed or otherwise affected. Patients showed no repugnance to it unless when given in suspension instead of in gelatine capsules. Dr. Wolff has no doubt

that at the onset of typhoid fever naphthalin may inhibit the development of the pathogenic microbes so far that the disease will be aborted ; and further, that at any period of the disease, over-production of the chemical toxins may be prevented, and the fever made to run a mild course.—(*Brit. Med. Jour. Supplement*, June 13, 1891.)

Case of Internal or Pelvic Spinal-Bifida.—In a paper read before the Medical Association of Georgia, April, 1891, Dr. Doughty says : “ I present this case merely to record it in the transactions of this Association as one of phenomenal interest. Its full history will doubtless be given to the profession by Prof. T. Gaillard Thomas, the distinguished gynaecologist of New York, to whom it was referred for a differential diagnosis from other forms of pelvic tumour. His exact diagnosis of ‘ Pelvic Spina-Bifida ’ I have since confirmed by a careful examination. As far as my investigations go, it is the fourth in a series of published cases—one by Dr. Emmet in 1870, and two others by Thomas in 1885. This is sufficient to indicate the rarity of the lesion, and will doubtless prove specially interesting to the gynaecologists of this Association, who, like myself, may at any moment be called upon, unexpectedly, to differentiate it from other tumours. For their instruction I will quote the concluding sentences of a summary of these cases (two of which terminated fatally under operative interference, performed without a clear comprehension of their exact nature), published by Thomas in *Gilliard’s Medical Journal*, March, 1885 :

“ ‘ Although our knowledge concerning this form of pelvic tumour is at present so meagre, we may, I think, even now deduce the following lessons from the two fatal cases recorded in this essay, which will prove useful for the prevention of a very possible increase in the number of similar unfortunate ones.

“ ‘ 1. When cyst is found in the pelvis, behind the rectum, filling the hollow of the sacrum, apparently attached to that bone, let the diagnostician carefully exclude the possibility of its being spina-bifida before interfering with it.’

“ ‘ 2. If it be decided to interfere with such a tumour, let a

small portion of fluid be first drawn by a hypodermic needle, and if this be found to be a limpid, non-albuminous fluid, let the probabilities of the sac being connected with the meninges of the cord receive due consideration, and guard against further interference.'"—*Southern Medical Record*.

Therapeutic Effects of Transfusion of Goat's Blood.—At a meeting of the Paris Société de Thérapeutique on May 13th (*Semaine Médicale*, May 16, '91) Dr. Bernheim read a paper in his own name and that of MM. Gardy and Lepelletier on the therapeutic effects of the transfusion of goat's blood. From a large number of experiments on animals, and from some observations made on human patients suffering from phthisis and chlorosis, M. Bernheim said he thought himself justified in drawing the following conclusions: The transfusion of goat's blood is in no way dangerous if it is performed with the necessary antiseptic precautions; several tuberculous subjects were so far improved that they might be looked upon as cured; the method may possibly be applicable in other diseases, such as chlorosis, obstinate hemorrhage, etc.—(*Brit. Med. Journal Supplement*, June 13, 1891.)

Operative Treatment of Perityphlitis.
—E. Sonnenburg discriminates between circumscribed suppuration and diffuse sero-fibrinous exudations in these cases, and only advocates operative treatment in the former group, in which he would interfere by operation, whether threatening symptoms exist or not. In cases where the pus cavity is deep-seated or obscure, Sonnenburg recommends operation in two stages. On the second or third day of illness he incises freely down to the peritoneum at the part where tenderness and resistance most distinctly lead one to suspect the presence of the pus; then, after an interval, varying in his cases from one day to five, he explores with a hollow needle, and daily repeats the manoeuvre till the abscess cavity is found. He believes that the primary incision not only enables one more readily to determine where the pus lies, but also in a measure brings about "pointing" from

diminution of the pressure of the wall at the part. The punctures, so far from doing injury, provoke, he thinks, adhesions which will shut off the peritoneal cavity. Sonnenburg advises against removal of the appendix vermiformis if at all adherent, though regarding the step as theoretically the correct treatment. — *Centralblatt f. Chirurgie*, No. 19, 1891.

The Neuroses of Development.—Dr. Clouston, in his recent lectures on the “Neuroses of Development,” is inclined to attach importance to the shape of the palate as an index of brain development. He classifies palates into three groups according to their shape, of which the first, the typical or “horse-shoe” arch, and the second, the neurotic or “gothic” arch, occur in about equal proportions in the healthy; the third variety, or “deformed” palate, has for its most common form a V or saddle-shape, produced by the presence of a bony shoulder alongside of the teeth on each side, but also includes palates in which there are marked central bulgings, depressions, or cup-shaped hollows. In 604 sane persons, some variety of the “deformed” palate was found in only 19 per cent.; while in 161 persons, either idiots or suffering from some congenital mental defect, it was present in 61 per cent. and of cases of acquired insanity, in the insanity of adolescence, which shows the most marked heredity, in 55 per cent. The important relation of the palatal arch to the base of the skull in man is shown by the fact that a perpendicular let fall through the most anterior part of the brain passes through the middle of the palate, whereas in the monkey it only touches its posterior margin. On account of the close relationship of the upper maxilla to the base of the skull, and necessary dependence of the skull-case and palate on the development of the brain, the shape of the palate may afford an index to the latter. If brain-growth dominates skull-growth in all parts, it will determine the development of the palate; and the size and shape of the brain being governed by hereditary influences, a bad nervous heredity will declare itself both in a badly-formed brain and in an abnormal palatal arch. The deformed palate is not an expression of the

reversion to a lower type of skull; for in savage races the shape of the skull, if not altered from disease or degenerative changes, does not modify the dome of the palate nor convert it into the V-shape. The shape of the palate makes no difference to the sense of smell nor to the power of mastication, but alters very materially the facial expression and slightly affects the speech. He considers that the vaulted palate and altered dental arch are to be taken with other abnormal changes in the head, and especially in the facial expression, as morphological indications of defective development; and that the change in the shape of the palate may possibly be explained by the supposition that the frontal lobes, the part of the brain which lies above the palate, become arrested in development through bad heredity, and the base of the skull in front is therefore narrowed, while at the same time the jaw must remain large enough to hold the normal number of teeth.—*Bristol Journal*.

Melancholia as a Sequela of La Grippe.

—No more interesting report of the influence of the influenza epidemic of 1889-90 has fallen under observation than that embodied in the last annual report of Dr. Clouston, superintendent of the Royal Edinburgh Asylum. An examination into the character of cases admitted during that period demonstrated two marked facts. First, that the general health of the patients admitted was much lower than usual, fifty having been admitted "in bad health and very exhausted condition"—*i.e.*, in imminent risk of death—as compared with an average of thirty-eight during the fifteen previous years. The other prominent fact concerning the admissions during the year was this: In the two chief divisions made of the mental conditions of patients, mania and melancholia, the number of cases of melancholia more than equalled those of mania, there being 140 of the former against 134 of the latter. This is contrary to the usual rule, as mania commonly predominates. During the five years previous, 847 cases of mania were admitted to 617 of melancholia, or 37 per cent. more cases of mania. In no previous year in the history of the institution had the number of cases of melancholia ex-

ceeded those of mania. Not that melancholia was a less common form of trouble than mania, if all who suffer from it are taken into account. In his experience the contrary was true; but much melancholia was never sent to an institution, and did not need to be sent. From his observation, he had concluded that the year 1890 was, with them in Edinburgh at least, depressing in its conditions to the nervous tone and lowering generally to human vitality. Whether it was the influenza in the early part of the year that perceptibly lowered human vitality as a whole, or whether its presence merely showed that European humanity was in a lowered state of vitality, thus being a fit nidus for the influenza germs to propagate in, or whether it was the sunless, summerless general character of the year, he could not tell.

Dr. Clouston distinctly connects the increased number of melancholiacs with the influenza in some way. His experience, with that of medical *confrères*, he states, went to show that a considerable number of influenza patients felt great mental depression, both during and after attack had passed off, often for months. If a few with a tendency to insanity, of the thousands who were simply depressed in mind, became insane, the increased number of melancholiacs would be accounted for. In his opinion the subsequent lowered nervous tone left as an evil residuum long after the disease had been recovered from had not had the attention paid to it that it deserved. He believes that the epidemic of 1889-90 left the European world's nerves and spirits in a far worse state than it found them, and that they had scarcely yet recovered normal tone. The influenza poison seemed to burn up the nervous energy, and leave the brain unable in some case to recuperate.—*Journal of Nervous and Mental Disease.*

Resection of Lung for Early Tubercular Disease.—M. Tuffier, on May 5th, 1891, performed the operation on a male patient aged 25. By an incision in the second intercostal space the parietal pleura was reached and separated towards its apex from the ribs. On opening the pleura the apex of the lung in which the nodule of disease could

be felt was drawn out through the wound, and a silk ligature passed round it so as wholly to include the nodule in the portion which was severed. The stump was stitched to the deep surface of the second rib, and the wound closed layer by layer, the patient making a good recovery. M. Tuffier only claims as the result of this interference the removal of a localized lesion, not a cure of the tubercular disease.—*Semaine Médicale*.

Inflammation of the Vermiform Appendix.—The classification of appendicitis that seems to satisfy most requirements, clinical and pathological, is that of With of Copenhagen, referred to by Wynter. Modifying With's classification a little, we believe the leading varieties may conveniently be known as (1) Plastic, (2) Purulent, and (3) Perforative.

1. Plastic appendicitis is characterised by the development of adhesions between the appendix and neighbouring organs, and would correspond to the variety clinically known as Recurrent Appendicitis. Such adhesions may be either a few fine threads joining the appendix, usually at some point near its tip, to some abdominal organ; or they may be of the most extensive character, being general matting together of bowel with dense fibrous tissue, in the centre of which is the appendix. In one case at operation I have found quite acute symptoms produced by adhesion of the tip of the vermiform appendix to the left ovary; in another, the appendix was with much difficulty found embedded in a mass of surrounding adhesions. The symptoms here are chronic or recurrent, with complete or partial remissions.

2. Purulent appendicitis is characterised by the early formation of an abscess or abscesses around a perforation in the appendix. Such an abscess is protected or localised by adhesions, which prevent the diffusion of its contents through the general cavity. Secondary and outlying abscesses are formed around the first; and if the patient survives and operation is not performed, we may find around the small appendix an enormous collection of pus contained in several pouches, the walls of which are formed by adherent bowel or bare parietes. A rare form, in which the perforation takes place between the layers of the

appendicular mesentery, may burrow under the peritoneum of the pelvis and right loin. This variety, though it may follow the first, is usually subacute from the beginning, and has but little remission till the disease is at its worst, in from a fortnight to three weeks.

3. Perforative appendicitis is intended to refer to the variety in which there is a sudden discharge of faecal matter into the abdomen, without the formation of protective adhesions. There is collapse, more or less profound, from the beginning of the onset, which is usually without warning; and, in spite of operation, unless when performed very early, the result is almost uniformly fatal.

Recognizing these as natural varieties, we must further note that they occasionally run into each other. Thus, a plastic appendicitis may become purulent; and a purulent and protected appendicitis may suddenly become diffuse. But it is certainly the case that they most frequently remain distinct during the greater part of their progress.

This is not the place in which to discuss symptomatology, but I may refer to a few signs which seem to be noteworthy.

McBurney's "point" has been made a good deal of, and has been alternately overpraised and discredited. This symptom is elicited by pressure with the point of the finger over a small area about midway between the umbilicus and the right anterior spine of the ilium. This area overlies the base of the appendix. I believe it is a sign of real value in all cases of plastic appendicitis. In the suppurative variety there is usually palpable thickening, and an area of tenderness wider than can be covered by the finger; in the perforative variety the symptom is of little value.—*Ext. of Paper by J. Greig Smith in Bristol Journal.*

Upon Catgut Infection.—(By C. Brunner of Zurich).—Brunner discusses the manner of manufacture of catgut and the methods of preparation and preservation for surgical use. He points to the fact that Reverdin first taught the method of sterilization by dry heat and obtained an excellent result. Published instances of catgut infection by Zocher, Zweifel, Volk-

mann and others are referred to, these being entirely due to catgut prepared by carbolic acid oil. In answer to the question addressed to many surgical and gynaecological clinics regarding experiences with catgut, invariably favourable replies, particularly with reference to sublimate catgut, were returned. During the past four years, in the Zurich clinic, a careful search has failed to reveal any complication that could be referred to this material. This included herniotomies, laparotomies and extirpations of the thyroid body. Similar experiences were gleaned from the work of Sanger, Crede and Caruso in the use of catgut as buried uterine sutures in Cæsarian section.

As to the absorbability of different methods of preparation of catgut, the author agrees with Bruns that in case of suppuration more rapid disintegration of this material occurs, while in other cases, or those pursuing an aseptic course, an essential difference is to be observed. All methods of preparation lessen the resistance of the catgut in the tissues as compared with raw gut; this is less observed in the chromic acid methods of treatment, as well as that of Reverdin.

The second portion of Brunner's article is taken up with an exceedingly valuable contribution to the bacteriological study of catgut in its surgical relations. In examining catgut from different sources, and kept for different lengths of time, it was shown that the sublimative disinfection as carried on in the factories was such as to render the material absolutely and permanently free from germs; Reverdin's catgut likewise proved itself to be sterile without exception. Catgut prepared in carbolic acid, chromic acid and in juniper oil was found, not infrequently, to contain micro-organisms, although, indeed, these were not of a pathogenic character.

Brunner directed his attention particularly to methods of sterilization which should guard against anthrax infection. Catgut known to be thus infected was employed. As a result of this he holds the following method of preparation to be the best: Raw catgut is thoroughly scrubbed with a brush and potash soap, and then directly, after a half hour's exposure to ether, where it should remain for twelve hours in a 1-1000 watery

solution of sublimate. It is then prepared in sublimate 1 part, alcohol 900 parts, and glycerine 100 parts.

Experience does not seem to have supported the observations of Kocher regarding the applicability of silk as material for ligature in place of catgut. Those who have followed the warning of the latter surgeon and have substituted the former for the last named material have very soon discovered this fallacy and have been obliged to return to catgut. The same may be said of those who have found refuge in linen thread as a substitute for catgut. Although such substitution may at first sight appear to be a simplification of the antiseptic apparatus, yet it really is a backward step.—*Beitrag zur klin. Chir.*, Bd. vi.

Milk Diet in Typhoid Fever.—Prof. Da Costa thinks that the exclusive use of a "milk diet" in typhoid fever is overdone. The stools should be carefully watched to see that the milk does not disagree. His plan is to use three pints of milk and one pint of broth in twenty-four hours, given alternately, with a mid-day meal of arrow-root, or other thickened food. It should be given every two hours during the day and every three hours at night. In very light cases it may be given every four hours at night, but under no circumstances should nourishment be used less frequently.—*Coll. and Clin. Record.*

The *Ætiology of Cheyne-Stokes Respiration.*—At a meeting of the section in Medicine of the Royal Academy of Medicine in Ireland, held on May 22nd, '91, Dr. M. A. Boyd read a paper in which he reviewed all the physiological explanations of this phenomenon offered by writers on the subject since Stokes' time to the present day. He particularly pointed out the very rational explanations offered by Traube and Filehne, who regarded the respiratory derangement from the altered nutrition of the respiratory-centre point of view; and of those of the Dublin school, including Hayden and Little, who regarded it primarily from the cardiac point of view, and complimented the Dublin School as offering by far the best evidence, both clinically and pathologically, in explanation of the

phenomenon. Dr. Boyd, having alluded to the marked rhythmical irregularities between the heart pulse and respirations in this affection, drew attention to a point which heretofore in the literature of the subject, so far as he was aware, had not been alluded to—namely, that the latter portion of the forced respiratory phase of the Cheyne-Stokes cycle was chiefly an expiratory one, in contrast to the first portion of it, which was an inspiratory one; and that this forced expiration had a most important bearing on the weak ventricles of the heart, by helping them to squeeze the blood, on the one side, into the pulmonary artery, and on the other, into the dilated and inelastic aorta. In proof of this, he exhibited sphygmographic tracings showing that it was only during this expiratory portion of the respiration that arterial tension was raised in the arteries, and that this tension continued through the apnoeal period following, during which time the respiratory centre was fully supplied with arterial blood and the weak and degenerated left ventricle resting. He regarded the apnoeal period, during which time respiration was suspended, as only an effort on the part of the higher automatic centres to rest a heart the ventricle of which was too feeble to charge an arterial system the aorta of which might be dilated and inelastic, or the vaso-motor control of which might be defective, and whose own blood supply might be rendered insufficient in consequence, and its nutrition enfeebled. After the intrinsic muscle of the heart had been fed by this increased arterial tension of the expiratory and apnoeal periods, forced inspirations began again, and the heart contractions were stronger, but they failed to fill the dilated aorta until the forced expirations, by making pressure on the ventricles, came to their aid again.

The most typical and pronounced forms of Cheyne-Stokes respiration were to be met with in alterations of the heart and aorta produced by degeneration and disease. The forms of it met with in cerebral disease, or injury, and in apoplexy and uræmic coma, without any primary engagement of the heart, he regarded as due to direct interference with the respiratory centre in the medulla, either by pressure or by poisoned blood, and the phases of it were never so well marked as in these cases

of the affection depending primarily on alterations in the heart. Owing to its dual origin in this way came the differences of opinion as regarded its pathology. As regarded its treatment, Dr. Boyd found so much improvement following the inhalation of oxygen in all the cases where disease or degeneration of the heart produced it, that he urged a trial of this remedy in all such cases, and ventured to suggest, from his experience of the remedy, that it should be tried not alone in this affection but in all cases where degeneration of the heart existed from any other cause.—*New York Medical Journal*.

Local Treatment of the Throat in Diphtheria.—The cruel and useless practice of swabbing out the throat with caustic applications in diphtheria of the fauces has, I think, died out; but this method of applying astringents, such as perchloride of iron, or antiseptics and solvents, still survives. The diphtheria wards in the Hospital for Sick Children afford exceptional opportunities for observing the effects of various methods of local treatment; and, from long observation, I have no hesitation in condemning as injurious the system of brushing out. And this for several reasons. In the first place, on account of the distress it causes to the patient. In the case of a young child it involves a severe struggle; sometimes the help of two or three persons is required to overcome the fierce resistance, and to open the mouth and reach the fauces. It causes terror, excitement, heart strain, and physical exhaustion—conditions most inimical in a disease tending to death by asthenia—and the distressing process has to be repeated frequently if it is to be effectual. Moreover, apart from this matter of the wear and tear involved, the rough treatment of the fauces probably does harm by causing abrasions of the surface, and thus favouring absorption of the local poison. We know how readily fresh raw surfaces of all kinds take up poisons which come in contact with them. Witness, for example, the communication of scarlet fever in surgical operations, the absorption of morphine from a blistered surface. If the diphtherial poison is rendered more available for circulation by the application of

solvents, the infective absorption is liable to be still greater. The most rapidly fatal case of diphtheria from profound general systemic poisoning I have ever seen was one in which the throat was cleared of membrane by brushing out with papain.

I am sure that not only are the patients saved great distress, and doctors and nurses much trouble and anxiety, by the abandonment of the brushing-out process, but the results generally have been more satisfactory. Insufflation with iodoform or sulphur, or spraying with boric acid or corrosive sublimate solutions, are far more easy of application, and more effectual in antiseptic action.

There are other errors in treatment of which I should like to say something, such as oppressive poulticing of the chest in pneumonia, obstructive to respiratory movement, and tending to increase the body heat; the administration of emetics in diphtheritic croup, which is utterly ineffectual except to depress and exhaust the patient; their frequent repetition in bronchitis and whooping cough when there is no extreme mucous obstruction of the air passages to justify it; the too free purging of rickety children suffering from laryngismus and convulsions, under the belief that irritant matter in the alimentary canal is the sole cause of evil. But time forbids me to do more than allude to these things. I will merely add this word of advice. In treatment, consider as carefully what not to do as what to do. To avoid doing harm is as important as to effect positive good.—
Dr. W. B. Cheadle in the Practitioner.

Nocturnal Enuresis.—Dr. van Tienhoven suggests (says the *N.Y. Medical Record*), in the *Correspondenzblatt f. Schweizer Aerzte*, that though the bladder acts normally through the day, it misbehaves at night. He believes that the vesical sphincter is not strong enough to keep back the urine which collects in the bladder in the early hours of the night and permits it to find its way into the prostatic portion of the urethra. The detrusor vesicæ is thus reflexly stimulated and the bladder emptied. In order to prevent the urine from running into the urethra in this way the children were made to sleep with the

pelvis elevated. In this position the bladder is capable of holding a certain amount of urine before the liquid reaches the level of the urethral opening. The foot of the bed must be elevated so that the bed forms an angle of forty-five degrees with the horizontal. The children should be sent to bed with empty bladders, and should not take any liquid just before retiring. They sleep well in this position and do not complain. Fourteen cases were treated by this simple method only, and all were cured in a short time.

Aristol.—Dr. Alois Pollok (*Therapeut. Monatsh.*, XII., 1890) recommends aristol as an antiseptic, and as a remedy in various skin diseases, on the ground of experiments made in numerous cases. Inasmuch as this substance is insoluble in water, he employed it chiefly as a dusting powder, or in ethereal solutions or ointments. For obvious reasons, it cannot be utilized for disinfection of the hands, instruments, and the site of operation, or as an antiseptic during the operative procedure. On the other hand, it is very serviceable for the treatment of wounds after operations, or of neglected injuries. It has the great advantage of being effective in small quantities, so that wounds need only be covered with a thin layer; if desired, it may be diluted with sugar of milk. In all the cases treated with aristol by the author, the healing process took place without reaction. Fever never occurred, and if present before operation, it disappeared regularly within the first few days after its performance. There was an entire absence of pains, granulations were developed with remarkable rapidity, and formation of epithelium took place promptly. The period of healing was remarkably short.—*Deutsche Med. Zeitung*, April 2, 1891.

Creolin in Tonsillitis.—Following up Leyden's recommendation of creolin as a disinfectant for the throat, Dr. Itzig has used it in follicular tonsillitis with marked success. Under its influence the purulent plugs in the lacunæ, as well as the swelling, tenderness and fever, disappeared within twenty-four hours, and the patient rapidly recovered. It was prescribed

as a 1 per cent. solution, diluted with equal parts or more of warm water ; and was used in the form of a gargle several times daily. The disagreeable burning feeling in the throat which creolin causes disappears rapidly on washing out the mouth with pure warm water.—*Therap. Monatshefte.*

Local Anæsthesia.—Dr. A. Dobish (*Allgemeine Mediz. Central-Zeit.*) employs the following proceeding for inducing local anæsthesia :

Chlorof.	- - - - -	10.00
Ether,	- - - - -	15.00
Menthol,	- - - - -	1.00

M. Sig.—Apply rapidly for about one minute with a Richardson spraying apparatus.

Having produced anæsthesia after this formula, Dobisch has performed (1) opening of deep-seated felon, (2) evacuation of cervical gland abscess, (3) opening of dental abscess with scraping of the maxillary bone, (4) excision of epithelioma on the nasal ala, and (5) removal of an atheroma from the face. The complete anæsthesia lasted from two to four or six minutes, and was not only superficial but deep, in operation No. 3 extending to the bone. Recovery was uninterrupted in every case.

THE
Montreal Medical Journal.

VOL. XX.

AUGUST, 1891.

No. 2.

CANADIAN MEDICAL ASSOCIATION.

As announced in our last issue, it has been decided by the committee of arrangements to hold this year's meeting of the Association on the 16th, 17th and 18th September. The new and elegant building of the Young Men's Christian Association, recently erected on the north-west corner of Dominion Square, has been secured for the occasion. In addition to the main hall, in which it is proposed to hold the general meetings, there will be three spacious section rooms, besides committee rooms, writing rooms, etc. The order of proceedings has not yet been published, but we are authorized to state that the first day will be devoted entirely to the business of the Association; on the second day there will be two sessions, and in the evening a dinner by the profession of the city; on the third day, a morning and afternoon session. Weather permitting, there will be other attractions in the shape of excursions, receptions, etc.

It is now seven years since the Association met in this city, under the able presidency of the Hon. Dr. Sullivan of Kingston. It will doubtless be remembered that many eminent men in the profession in Great Britain were present on that occasion, having been attracted here by the meeting of the British Association. As already intimated, it is expected that a few of the British and Continental delegates to the Washington meeting may be persuaded to come this way and "take in" the Canadian Medical *en route*. No definite statement can, however, be made on this point. Several American physicians will be present.

The secretary, Dr. Birkett, 123 Stanley street, will be pleased

to give any information regarding the meeting to intending visitors. Judging from the number of invitations already accepted, the meeting is likely to be a large and interesting one.

NUMBER OF PRACTITIONERS IN CANADA.

We are indebted to an old friend for straightening our figures for us.

To the Editors of THE MONTREAL MEDICAL JOURNAL

SIRS,—In an editorial in your July issue you give the number of practitioners in Canada as 3,500. I would correct that statement by saying that the total approaches 4,200. Arranged by provinces, the figures are about as follows :

Ontario.....	2,300
Quebec.....	1,100
New Brunswick.....	170
Nova Scotia.....	300
Prince Edward Island.....	60
Manitoba.....	140
North-West Territories.....	50
British Columbia.....	60
	4,180

Yours truly,

R. W. POWELL, M.D.

199 Rideau Street,

Ottawa, July 13, 1891.

Personal.

—Dr. A. A. Browne has returned from Europe and resumed practice.

—Dr. John McBain (McGill, '74), late of Martintown, Ont., has recently settled in the west end of St. Catherine street, this city.

Obituary.

DR. R. L. MACDONNELL.

It is with infinite regret that we find ourselves called upon to record the death, on the 30th ult., of Dr. Richard L. MacDonnell of this city. In the prime of life—for he was but 38—one of the ablest physicians and most popular citizens has succumbed to the great scourge, pulmonary phthisis. Somewhat more than two years ago Dr. MacDonnell suffered from a severe pulmonary hæmorrhage: he gave up work and spent a year in Europe, chiefly in the Alps, returning in such improved health that his friends were fain to believe that the threatened complaint had been indeed arrested. He resumed his practice and his teaching, which he continued until a few weeks ago. Whilst at Murray Bay, where he had gone for rest and change, serious symptoms developed, and he was brought home in a state of great exhaustion, surviving but a short time.

Dr. Richard MacDonnell was a son of the late Dr. Robt. L. MacDonnell of this city, an eminent and accomplished physician. The son inherited much of the ability of the father, being possessed besides of a gentle, kindly, considerate disposition which made him more than commonly beloved by his patients and his pupils. Having graduated from McGill University in 1876, he studied for a year in Europe and obtained the M.R.C.S. Upon his return he was appointed one of the Demonstrators of Anatomy and subsequently assumed the position of Senior Demonstrator in charge of the department of Practical Anatomy. The onerous duties of this important post were performed with the most unflinching punctuality and thoroughness, and he helped materially in upholding the high reputation of McGill for the teaching of anatomy. He was soon appointed Assistant Physician and then Physician to the Montreal General Hospital. Upon a vacancy occurring, he became Professor of Clinical Medicine, exhibiting marked talent in the teaching of sound practical medicine to students. Possessed of a very thorough general education, imbued with the scientific principles of medicine, of strong literary

tastes, with a ready power of expression, he had all the qualities necessary for the successful teacher. His work in our medical societies and his contributions to current medical literature have been characterized by remarkable thoroughness and conscientiousness, their style being always beyond criticism. His articles upon Typhoid fever and upon Thoracic aneurism are well known and he contributed largely to the standard "Reference Handbook of Medicine." "Dick" MacDonnell, as he is lovingly called by so many, had hosts of friends throughout Canada who will join us in mourning the loss of one who was an ornament to the profession for whose best interests he always strove, and in expressing unfailing regret that such a life should have been such a short one.

—We regret to learn that Dr. Geo. A. Tye, of Chatham, Ont., died on the morning of the 23rd ult., aged 56 years. Dr. Tye was well known throughout the West as an exceptionally able practitioner, one who kept well abreast of medical progress. If we mistake not, he was at one time president of the Ontario Medical Association. We know well how prominent a part he took in the meetings of the Canadian Medical Association. The family have our heart-felt sympathy.

Medical Items.

URINE FOR INSECT STINGS.—Dr. Terry, in *Dietetic Gazette*, says that fresh urine, freely applied, is the best remedy for stings of hornets, bees, and other insects. Wet cloths with it and apply until the pain ceases. The doctor thinks that the urea contained in the urine is the chemical antidote to the poison. How would this do for snake-bite also?—*Medical World*.

FINANCIAL LOSSES OF SIR JOSEPH LISTER.—Every member of the profession will be sorry to hear that Sir Joseph Lister has, through the bankruptcy of John Taylor, a well-known London stock-broker, lost upwards of eighteen thousand pounds. It appears that Sir Joseph Lister had entrusted Mr. Taylor with the money to invest in securities, instead of doing which he applied it to his own purposes.—*Hospital Gazette*.

AN OBSTETRICIAN'S LIBERALITY.—Professor Tarnier, the celebrated French obstetrician, has given a practical expression to his grief at the diminishing natality of his race, and has promised one hundred francs to every family at Arc-sur-Fille, the village which had the honor of giving him birth, which shall have contributed an infant to the population of France during the year 1892. This is a novel way of inducing married people to fulfil their rôle in nature, but they cannot complain of not having had sufficient notice.

—At a meeting of the Board of Trustees of the University of Pennsylvania held May 21st, Dr. Pepper made an offer of \$50,000 toward an endowment fund of \$250,000, and of \$1,000 annually towards a guarantee fund of \$20,000 annually for five years, conditioned upon the establishment of an obligatory graded four-year course of medical study. This was accompanied by a communication from the Medical Faculty pledging themselves to carry out this proposal, and to enter upon the four-year course in September, 1893.

—Sir Wm. Dalby sounds a timely note of warning in reference to "Bubble" Remedies in Aural Surgery. Under this heading

he includes (1) the promiscuous use of artificial ear-drums, for the manufacture and sale of which a company was recently floated in London with a capital of £100,000; (2) the use of electricity by all sorts of incompetent persons; (3) the mutilation, by removal, of the turbinated bones of the nose for deafness, in cases where the nose is perfectly healthy and unaffected; (4) the hypodermic injection of pilocarpine in totally unsuitable cases; (5) the division of the tensor tympani muscle for deafness. This last he describes as including in its history "a flight of the imagination, a brief notoriety, and a burial in oblivion so rapid as falls to the lot of few achievements in surgery."—*Bristol Journal*.

AN EXPLOSION OF COMPRESSED CHLORATE-OF-POTASSIUM TABLETS.—In the June number of the *Therapeutic Gazette* reference is made to an article which appeared in *La Pratique médicale* for May 5th, calling attention to an accident that had happened from carrying chlorate-of-potassium tablets in the pockets. The tablets had been prescribed for a patient who was suffering from ulcerative stomatitis, and he was in the habit of carrying the medicine about with him. One day, as he sat down, a detonation was heard, and before he could remove his clothes he was seriously burned. The tablets, wrapped in a piece of paper, were carried in his pocket together with a pen-knife, and it is supposed they detonated under the influence of concussion and set fire to his garments.

—"Well, Maggie," asked a teacher of a little girl, "how is it that you are so late this morning to school?" "Please, sir," was the reply, "there wis a wee bairn came to oor hoose this mornin'." "Ah," said the teacher with a smile, "and was not your father very pleased with the new baby?" "No, sir, my father's awa' in Edinburgh and dinna ken aboot it yet; but it wis a guid thing my mither wis at hame, for gin she had been awa' I wadna hae kent what to dae wi' it."