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.

- ☐ 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.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

The Canadian Practitioner and Review.

VOL. XXIX. TORONTO, SEPTEMBER, 1904. NO. 9.

Original Communications.

THE UNCERTAINTIES OF DIAGNOSIS AND THE NECESSITY OF EARLY AND VIGOROUS TREATMENT OF DIPHTHERIA.*

BY T. F. McMAHON, M.D.

The death rate from diphtheria in Ontario, as elsewhere, is altogether too high. In 1902, two thousand six hundred and ninety-six cases were reported, with a mortality of 15 per cent. In Toronto, 893 cases were reported with 115 deaths—a mortality of 13 per cent. Hamilton had 22 per cent. of deaths, Brantford, 16 per cent., and Ottawa, 12 per cent.

In Ontario the people are as a rule well fed and well housed, and the results ought to be much better than in the crowded, poverty-stricken centres of the older countries. In the pre-antitoxin days our percentage of mortality was much lower than in New York and the large cities of Europe, where the mortality averaged from 30 to 40 per cent. If their percentage mortality has been lowered from the above rate to 16 per cent. or less, surely ours in Ontario ought to show a corresponding decrease. But the report of the Ontario Board of Health shows that in 1902 it was 15 per cent.

I have questioned a large number of practitioners who use antitoxin faithfully and intelligently and they tell me that they now rarely lose a case of diphtheria, whereas in the pre-antitoxin days a very large percentage of their cases succumbed.

I am not going to enter into any argument to prove the efficiency of antitoxin. I take it that you will agree with me

* Read at Meeting of Ontario Medical Association,

that nearly every intelligent practitioner is as firmly convinced of the efficacy of antitoxin in diphtheria as of that of quinine in malaria or mercury in syphilis. I shall assume then that we are all believers. The object of my paper is to point out that many lives are lost that ought to be saved, and that as a result of faulty or tardy diagnosis and late and half-hearted treatment the death rate is double or treble what it ought to be. Let us examine our consciences and find wherein we have been remiss.

For many deaths we are not responsible. Those in charge of sick children often do not call in the physician until fatal poisoning has occurred. But there remain a large number of cases in which the physician is called in early and yet the undertaker follows in his wake. Let us examine the causes of his failure.

1. His attention is not specially directed to the throat and he fails to look at it, and diagnoses something else. By the time he recognizes his error the case is hopeless. The golden rule is "Always examine the throat of a sick child no matter what the symptoms are." The physician who fails to diagnose diphtheria because he did not look at the throat ought to be prosecuted for malpractice.

2. He examines the throat and thinks he has a case of tonsilitis or coryza or croup to deal with; or that, even if it is diphtheria, it is so mild that the old-fashioned remedies are sufficient for its cure.

3. He fails to follow up a suspicious case and finds too late that the patient is in a desperate condition.

4. He treats one amongst many children and fails to protect others exposed to contagion by a preventive injection.

5. He uses antitoxin but is half-hearted and does not use enough.

6. In a case of laryngeal diphtheria he uses antitoxin—perhaps in large doses—but fails to make early resort to accessory remedies such as calomel fumigation and intubation.

7. He makes an early diagnosis but puts off the injection of antitoxin until to-morrow or the day after.

For myself I must confess I have made nearly all these blunders, and have had occasion more than once to bitterly regret them. But it is now some five or six years since I have had a death from diphtheria in my practice. I well remember the last two I lost. In one I was called in to see a sick child; it had a discharge from the nose, but on carefully examining the throat I found no membrane. The parents told me they would let me know if the child was not doing well. Three days later I was called in and found the child dying from laryngeal and nasal diphtheria. In the other case I diagnosed

herpetic tonsillitis, because the spots were confined to the tonsils—*small, white and discrete. Some four or five days later* I was called in to find the child—who in the interim had been playing on the street, and doubtless spreading the disease among the neighbors—dying of laryngeal stenosis.

I had a couple of similar experiences in which the result was not so deplorable, but my culpability was as great.

Catastrophies like these caused me to ask myself—"Can they not be avoided?" "Is it possible to always diagnose diphtheria at the first visit?" "Can I afford to wait from one to three days for a bacteriological report?" "And can such report always be depended upon?" The conclusions I have arrived at are that such catastrophies almost always can be avoided; that it is often not possible to diagnose diphtheria at the first or any other visit without bacteriological examination, and I believe firmly that a bacteriological report is not always to be depended upon.

The Toronto Board of Health has an exceedingly efficient and painstaking bacteriologist—so has the Ontario Board of Health. And yet both will, I think, admit that they have made many negative reports where the subsequent course of events proved beyond any reasonable possibility of doubt that the swabs were taken from cases of diphtheria. I could quote some examples from my own practice, but the following three cases will serve to illustrate the difficulties.

1. Dr. Dwyer reports the case of a Toronto physician, swabs from whom were repeatedly examined by both Prof. Amyot and Prof. Shuttleworth, without any diphtheria bacilli being found. And yet severe—indeed almost fatal—paralysis, involving the arms, legs, throat, larynx and heart, supervened, and two others in the family developed the disease.

2. Dr. Nevitt reports the case of a young woman who had a violent sore throat—clinically, diphtheria. To prevent the spread of infection to children in the house he sent her to the Isolation Hospital. Repeated examination failed to reveal the presence of diphtheria bacilli, and yet she developed well-marked paralysis.

3. Dr. Uren reports the case of a girl aged twenty sent by him to the Isolation Hospital as a case of diphtheria. In four days she was sent home, as no diphtheria germs were found. But three weeks later extensive and serious paralysis supervened.

I need not multiply examples, for it is admitted that for some mysterious reason we may fail to get diphtheria germs from swabs taken from undoubted cases of diphthria.

Having arrived at the above conclusions, I asked myself, "What are you going to do about it?" And the answer was

evident—take no chances. In every case in which there is even a suspicion of diphtheria give antitoxin at once, and give it freely. Get a report in every doubtful case, but do not wait for the report but inject at once. As soon as bacteriological examination shows the presence of diphtheria bacillus give an injection to all the children of the household to prevent the spread of infection. Of course isolation and other methods of preventing the spread of infection must not be neglected, but neither must the preventive injection. Doubtless, if this practice is carried out, many unnecessary injections will be given. I have often injected antitoxin and found as a result of bacteriological examination that the case was not one of diphtheria. But what harm was done? I have never seen any bad results from the injection. In fact it has been my experience that the cases of membranous tonsillitis thus treated seemed to clear up more rapidly than those treated otherwise, and many physicians have expressed to me the same opinion.

There is but one serious objection—that of expense. But in my opinion prevention is cheaper as well as better than cure, and it would be cheaper for the municipality to supply physicians with preventive injections for the poor than to have the diphtheria hospitals crowded with patients kept for an average period of five weeks at an average expense of well on to a dollar a day.

There is nothing like a local example to illustrate a truth, and this is supplied in the experience of the Victoria Hospital for Sick Children with preventive injection, as related by Dr. Rudolf in a recent article in the *British Medical Journal*.

In 1901 about one hundred cases of diphtheria developed in the hospital, nearly all of which were treated with antitoxin. Of these only three died, and one of these was complicated with scarlet fever. Between January 1st and July 7th, 1902, forty-two cases (all showing the Klebs-Loeffler bacillus) developed. All, except a few of the mildest, were treated with antitoxin. Forty-one recovered, and the one that died developed uræmia due to kidney disease that pre-dated her admission to the hospital. For five years there had never been two successive weeks in which diphtheria had been completely absent from the hospital. Early in July, 1902, a determined effort was made to stamp out the disease by the injection of immunizing doses into all the patients. The result was most gratifying. For the five months reported not a single case of diphtheria occurred in the hospital, though the usual number of cases had been occurring elsewhere in Toronto. The germ was found present in the throats of many, but its hosts were immune and hence no diphtheria occurred.

The diagnosis of diphtheria is usually easy—often difficult—

and sometimes impossible. A patient may have a sore throat, with diphtheria bacilli present, and yet no membrane forms. If exposure to diphtheria is known to have occurred, it is better to regard the case as one of mild diphtheria and treat it accordingly.

There are certain mild exudative inflammations of the throat in which it is quite impossible to say whether we have diphtheria or pseudo-diphtheria to deal with. They look exactly alike, and the symptoms and duration are the same. Indeed, so much alike are they that if we were called in and told that one case was diphtheria and another pseudo-diphtheria we should be quite unable to say which one was the diphtheria. Should we wait for a bacteriological report and risk fatal poisoning and involvement of the larynx? No! We should inject antitoxin and make it a practical certainty that our patient will recover.

A fatal source of error is to confound catarrhal laryngitis or the old-fashioned inflammatory croup with diphtheria of the larynx. When there is even the smallest patch of membrane in the pharynx the diagnosis is clear, but unfortunately there are many cases of primary laryngeal diphtheria. We cannot be sure whether the laryngeal stenosis is inflammatory or membranous, and the only safe treatment is to inject antitoxin at once. Should subsequent events show the case to be one of diphtheria we have probably saved a life, and if not we have done no harm. I cannot be too emphatic on this point. Every case in which there is even a suspicion of laryngeal diphtheria should be promptly treated with antitoxin. Many years ago, in the pre-antitoxin days, I reported a series of cases treated with calomel fumigations with excellent results. Time and further experience have but confirmed the favorable opinion I then formed of this plan of of treatment.

For the past ten years I have treated all my cases of laryngeal diphtheria as follows:

1. Inject antitoxin, full doses.
2. Fume calomel under a tent (30 grs. an hour) until stenosis is relieved.
3. Intubate early if symptoms demand.

I regret that I have not a full record of my cases, but the results have been marvellously good. Every case I have seen and diagnosed early has recovered.

The early diagnosis from scarlet fever has in some instances puzzled me very much. The diseases often co-exist in the same patient, and in some malignant cases of scarlet fever there is a very imperfect developement of the rash—indeed the patient sometimes dies before the rash is due to appear. In three of my cases there was so much doubt that I injected

antitoxin. In each the rash came out on the second or third day, and diphtheria germs were found in cultures from the throat. Dr. Tweedie tells me that there is mixed infection in about 16% of the cases admitted to the Toronto Isolation Hospital.

The diagnosis from ordinary follicular tonsillitis is not always easy, nor is it indeed possible in some instances. In fact mild diphtheria quite frequently occurs with the semblance of ordinary follicular tonsillitis. My rule is to have swabs examined from every case, and, when in doubt, to inject antitoxin. Whether the exudate is removable or not influences my diagnosis but little. It can sometimes be readily removed in diphtheria, whilst on the other hand it is quite adherent in many cases of pseudo diphtheria.

A syphilitic throat sometimes closely resembles diphtheria, but with care there is little probability of error.

The last source of uncertainty in diagnosis I shall deal with is nasal diphtheria—especially the chronic form. An irritating discharge from the nose of a sick child should always excite suspicion and lead to careful enquiry even though no membrane be visible in the throat. I saw such a case in a child less than a week old who had an offensive discharge from the nose though nothing could be seen in the throat. How it contracted the disease I do not know, but bacteriological examination showed the presence of the bacillus, and if additional proof were wanting, it was supplied by the fact that the mother of the child contracted a severe form of the disease from it.

I was recently called at midnight to see a child that had been ill for three days, the parents supposing it had quinsy because it had an attack of that disease some little time before, and the symptoms were similar. I found the child desperately ill with naso pharyngeal diphtheria, but after an injection of 2000 units it made a prompt recovery: On looking for the source of contagion, I found that a young man in the house—a salesman in one of our large departmental stores—had an offensive, irritating discharge from the nose for about two months which resisted ordinary treatment. Bacteriological examination revealed the presence of diphtheria bacilli in the nasal secretion. In spite of vigorous treatment it was some six weeks before he was free from infection, although he felt well and ate his meals heartily throughout the whole three months.

One who recognizes the uncertainties and difficulties of diagnosis, and is prompt, bold and fearless in his treatment, will have a very low death rate indeed.

I believe that antitoxin is an absolutely certain specific remedy when given in sufficiently large doses early in the disease.

The most fatal form—laryngeal diphtheria—causes death either from stenosis, broncho-pneumonia, or sepsis, none of which will develop if a large dose of antitoxin is administered on the first day of the disease.

Children with enlarged tonsils and adenoids are in especial danger and require a specially large dose.

The same is true of nasal involvement. Intubation as a rule is not done early enough.

For the ordinary case of pharyngeal diphtheria without nasal or laryngeal involvement, I find a single dose of 1000 units, if given early, quite sufficient.

Dr. Louis Cairns published a most interesting paper in the *Lancet* of December 20th, 1902, on the intravenous injection of antitoxin. There are, he says, a certain number of malignant cases which show no improvement after the sub-cutaneous injection of even large doses (20,000 to 30,000 units) of antitoxin. He suggests two causes for its failure.

1. A selective influence on the part of the glands in filtering out the active constituents of antitoxin.

2. There is a definite chemical relation between toxin and antitoxin, and neutralization of the toxin goes on more quickly in concentrated solutions than in dilute ones.

He recommends an initial dose of from 20,000 to 30,000 units injected into the median-basilic vein, and the indications he gives for its employment in this way are:

1. Special malignancy of the disease.
2. Involvement of the lungs, especially if this complicates laryngeal involvement.
3. A moribund condition when first seen.
4. Marked toxic symptoms.

He reports fifty consecutive cases in the Belvidere Hospital, Glasgow. Of these he considered twenty severe enough to warrant intravenous injections. Of the fifty but three died. Thirty-one of the fifty cases showed laryngeal and seven nasal involvement. Fifteen were complicated with broncho-pneumonia. In seventeen cases it was found necessary to perform tracheotomy, and of these but one died.

The first case in which intravenous injection was tried was of special interest. A girl two years old was admitted pulseless, with cyanosed lips and cold extremities—the heart beating 185 to the minute, respirations 60, laryngeal obstruction almost complete. Tracheotomy was performed, but the lividity continued and was found to be due to broncho-pneumonia. The urine was loaded with albumen; 6,000 units of antitoxin were injected into the median-basilic vein. The patient continued desperately ill for two days, but on the third day mucus was

expectorated freely and she steadily improved and made a perfect recovery.

In another case broncho-pneumonia developed in spite of the sub-cutaneous injection of 18,000 units of antitoxin. Tracheotomy was then performed and 22,000 units of antitoxin were injected intravenously. There was immediate improvement and prompt recovery.

Gentlemen, when we see how much can be done for malignant cases, am I not justified in stating that our death rate is too high?

ON THE SURGICAL TREATMENT OF GASTRIC ULCER.

By FREDERICK W. MARLOW, M.D., F.R.C.S. (Eng.), Toronto, Ont.

The treatment of gastric ulcer is a subject deserving the most serious consideration, and as time advances it is becoming more and more an established fact that medicinal treatment must largely give way to surgical procedures in dealing fairly and adequately with this distressing condition.

The armamentaria of the physician have been severely taxed in this regard, but undoubtedly it has been his privilege, in a large proportion of such cases, to relieve symptoms and to avert dangerous complications, and so to prolong life by a choice of medicinal remedies and a careful regulation of the patient's diet and manner of living. But whereas in former years the surgeon was rarely called upon, save in the event of perforation occurring or other complication, such as sub-diaphragmatic abscess, it is now duly recognized that ulceration occurring in the walls of the stomach is amenable to surgical treatment in like manner to ulceration occurring in other accessible portions of the body.

A consideration of the inefficiency of medicinal treatment tends to show that this is attributable to various factors, and of these the most important is the impossibility of inducing in the stomach a state of rest, both physiological and mechanical, of a sufficient degree to allow definite healing to ensue, in the presence of those conditions almost always associated with gastric ulceration, namely, intractable hyperchlorhydria and stenosis of the pylorus, whether from muscular spasm or contraction of cicatricial tissue. Not even the most careful dieting can accomplish this, and on account of the anæmic condition of the majority of such patients no great amount of reliance can be placed upon rectal alimentation. Furthermore, these cases occur most frequently in females from fifteen to thirty or forty years of age, and undoubtedly a very large proportion of them are amongst the classes whom necessity bids to earn their own living and will not allow them to rest and practise careful regulation of their diet. But even amongst the well-to-do it is by no means uncommon, and to them it is anything but agreeable to maintain such fastidious care day after day in regard to their dietary, subsisting in a state of partial invalidism, and with a constant fear in their minds lest by some inadvertent step in this regard they may bring about a return of the symptoms or even render themselves liable to the occurrence of dreaded complications. Occurring in males it is most frequent between the ages of thirty and forty-five years, and to such patients a state of even partial or intermittent invalidism is most distressing.

But apart from the inefficiency of medicinal treatment, in the

majority of cases, while the ulcer remains there remains also the danger of hæmorrhage or of perforation. One author states that as many as 5 per cent. of all patients with gastric ulceration die of hæmorrhage. In a few cases a severe and even fatal hemorrhage may occur in the early stage of the disease, but the usual form is of slight magnitude; yet this is often so frequently repeated as to bring about a condition of profound anæmia. With regard to perforation, it is a most dangerous complication. Mr. Moynihan is quoted as saying, "The perforation of a gastric ulcer is one of the most serious and overwhelming catastrophies that can befall a human being," and were it not for perforation occurring in cases of acute gangrenous appendicitis, where the infectivity of any matter escaping into the peritoneal cavity is much more intense than that of stomach contents, such a statement would stand without modification. Undoubtedly in a great many cases actual perforation is averted or delayed by the occurrence of perigastric inflammation and adhesions, but such cannot prevent the spreading of the ulceration, and so perforation may occur subsequently. It is estimated that about 20 per cent. of gastric ulcers are situated in the anterior wall, and owing to the movement of the abdominal wall during respiration the formation of perigastric adhesions is uncommon and perforation is more likely to occur. That this is the case is borne out by the fact that about 80 per cent. of all perforations occur in the anterior wall. This is important in the operative treatment of such a complication, as it renders the site of the perforation more easily accessible.

The attitude of the profession to-day, as far as appendicitis is concerned, is one of early operative interference. In short, the dangers are recognized and respected, and so it is that much attention has been given to that least useful of all the abdominal viscera, and with so great reward. Considering this, does it not seem fit that surgeons should give heed to that important viscus, the stomach, and be ready when ulceration occurs within its walls, with all its attending discomforts and dangers, to afford relief by proper surgical procedures? The mortality of gastric ulcer is variously estimated at from 2½ to 50 per cent. by different authors, and it is probable that about 25 per cent. is a fair average. At least 25 per cent. of cases can be permanently cured by proper surgical treatment, and futurity will undoubtedly increase this low estimate. Amongst additional indications for operation are the facts that from 3 to 5 per cent. of gastric carcinomata develop in the bases of chronic ulcers and that in about 20 per cent. of protracted cases the patients develop pulmonary tuberculosis with fatal result.

Briefly, the principle upon which the success of surgical

treatment depends is that if untoward lingering of the stomach contents is prevented by affording them free access into the intestine, in a vast majority of cases healing of the ulcer, or ulcers, as the case may be, takes place and symptoms disappear. To accomplish this purpose the operation of pyloroplasty has been performed, but without any marked degree of success, and this is most likely on account of the high situation of the pylorus not allowing of effective drainage, and the necessity of the passage of the food over the area most commonly the seat of ulceration. The operation of choice, and which has given such excellent results, is that of "posterior retro-colic gastro-jejunostomy," and during the performance of such, if the ulcer is easily accessible and its extent be not large, it may be resected with advantage though this is unnecessary. As a result of this procedure efficient drainage from the most dependent part of the stomach is provided, hyperchlorhydria disappears, spasm of the pylorus is overcome, and the ulcer undergoes rapid healing. Relapse seldom if ever takes place, and the subsequent occurrence of a peptic ulcer of the jejunum is infrequent, the great majority of reported cases having followed upon anterior ante-colic gastro-jejunostomy in which, owing to the awkward displacement of the jejunal loop and the drag upon it by the varying transverse colon, the drainage provided is defective and some hyperchlorhydria may persist.

At a meeting of the London Clinical Society (*Brit. Med. Jour.*, December 19th, 1903, page 1592) Mr Moynihan reported a series of one hundred cases of gastro-enterostomy for gastric ulcer with a death rate of only two. The operations were performed for intractable dyspepsia, dilated stomach, or profuse and recurrent hæmorrhage, and in ninety-two cases the results were very satisfactory. In the remaining six—method used not stated—some hyperchlorhydria persisted. Gastric tetany occurred in five cases. Mr. Mayo Robson, at a meeting of the Royal Medical and Chirurgical Society (*Brit. Med. Jour.*, April 16th, 1904, page 894) gave a list of fifteen reported cases of peptic ulcer of the jejunum occurring after gastro-enterostomy, and nearly all of them after the anterior operation. In his own cases one such ulcer occurred in twenty-nine cases of the anterior operation, whereas there were none in one hundred and twenty-eight cases in which he performed the posterior operation, that is, the operation of choice.

NOTE.—A valuable paper by Mr. Gilbert Barling on the subject of gastro-jejunostomy performed for various conditions and by various methods may be found in the *British Medical Journal*, May 7th, 1904, page 1064. Statistics referred to above are taken from the "System of Practical Surgery," E. v. Bergmann and W. T. Bull.

699 Spadina Ave.

THE FINANCIAL RESPONSIBILITY OF THE MEDICAL EXAMINER FOR LIFE INSURANCE.*

By BRUCE L. RIORDAN, M.D.C.M., Toronto, Ont.
Medical Examiner North American Life Assurance Co.

The position of a medical examiner for a life insurance company is a confidential one, and it is the duty of the examiner to discharge all his obligations in this respect to the company, carefully, fully, honestly, and to the best of his ability. While one examiner may be able to discharge these duties with more skill and competency than another, it is only where negligence can be shown that there is any liability on the examiner from a legal point of view. If the medical examiner discharges his duties to the best of his ability, and exercises due care and precaution, and discloses all information received from the applicant, and carefully records the answers as they are given to him, to the various questions asked, using his best judgment as to the information which he himself furnishes to the company, his duty is performed, and there is no financial liability upon him in any way to the company, or to the applicant.

It has been decided in the courts that the medical examiner is the agent of the company for recording the answers of the applicant.—Grattan *v.* Mutual Life Insurance Company, 80, N.Y., 281 ; 92, N.Y., 274. Therefore, it becomes very important that the medical examiner should be a man skilled in his profession, and of undoubted honesty and probity, as his report would be receivable as evidence against the company, unless in those cases where it could be shown by the company that he was guilty of fraud and deceit in withholding material facts, either of his own accord, or at the request of the applicant for insurance.

The medical examiner is not the agent of the applicant for insurance.—Hollman *v.* Life Insurance Company, 1, Woods, 674. The facts concealed or misrepresented by the examiner must be material to the contract. If he misrepresents or does not disclose the correct answers of the applicant, the company is responsible for any damage resulting from such irregularity of the examiner, and there is no doubt that in the event of such irregularity being proved, the examiner would be responsible for the financial loss or damage suffered by the company that may have resulted from such concealment or negligence.

There, however, have been contrary opinions held in cases

*Read at meeting of Ontario Medical Association.

where the form of application makes the examiner the agent of the applicant, *i.e.*, where the statements contained in the form are declared or warranted to be true, and in one case where such statement was false, and was written therein by the medical examiner of the company, the policy was declared void.—Sternaman *v.* Metropolitan Life, 63, N.Y., S., 674 (1900).

The relationship between the company and the medical examiner should be one of trust, and such position should be occupied by one who is recognized as being a man of undoubted honesty, skill and thoroughness in the discharge of his duties. In many cases the company may suffer considerable loss in case his obligations are not discharged properly. It has already been decided in the Provident Savings Life Assurance Society *v.* Rutlinger, 58, A.R.K., 528, and other cases, that where the medical examiner fills in false answers to questions, which are otherwise answered by the applicant, but without the applicant's knowledge, and then procures his acknowledgment to the application in writing to these questions (by applicant's signature), the company nevertheless is bound and cannot have any recourse under the contract against the insured, but in such case would have an action against the examiner for any damages it may suffer in connection with the contract.

The examiner who writes in false answers in his report may be liable for criminal prosecution, and in many of the states there are provisions imposing a penalty for any such breach; notably in the State of Michigan, he is liable to fine not exceeding $1,000, or imprisonment not exceeding three months, and shall be liable to the company in an action on the case for the full amount of any insurance obtained from such company by means of, or through, such false report.—(See Michigan Revised Statutes, Sec. 4,235.).

A medical examiner is recognized as the agent of the company only as to that part of the application which he is required to write (Leonard *v.* State Mutual Life Assurance Company, 31, *Law Insurance Journal*, page 584).

The financial responsibility of a life insurance examiner is, therefore, an important question with the company, and an important obligation is assumed by the medical man who examines applicants for insurance.

SOME OBSERVATIONS ON THE NURSING OF TYPHOID FEVER.

By ELIZABETH CAMPBELL GORDON,
Graduate Toronto General Hospital.

We are taught in our hospital training that a thorough knowledge of the nursing of typhoid fever and its accidents and complications covers almost the whole field of medical nursing. We have learned that it is primarily a disease of the intestines, accompanied by a great waste of muscular tissue and pronounced disturbance of the nervous system.

Absolute rest and cleanliness of body, an abundance of fresh air, carefully prepared diet, intelligent bathing and sponging, thoughtfulness in guarding against complications, capability and intelligence to act in an emergency, and the knowledge that the condition of the brain and nerve centres must be regarded as a part of the physical welfare of the patient are essential points in the nursing of typhoid patients.

We know that the basis of bodily cleanliness both in health and sickness, but particularly in sickness, is a thorough soap-and-water bath once in twenty-four hours. Let this, combined with an abundant supply of oxygen, be the foundation of hygienic treatment of a typhoid patient. Give the bath in the morning, when it is customary to change the bed and body clothing, thus giving the patient a fresh feeling throughout. Use good soap and plenty of water, with a little carbonate of soda, borax, or ammonia added. Go thoroughly over the whole body, paying particular attention to the groin, axilla, and feet. Soak the feet well, and rub in cocoa-butter when the skin tends to form in horny scales. Complete the bath by rubbing the patient from head to foot with equal parts of alcohol and water. Bear in mind that the cleansing of the skin induces perspiration, assists desquamation, keeps the pores open, and thus aids the absorption of oxygen as well as the escape of poisonous excretions. Let the skin, as well as the lungs, act as an oxygen medium. For this reason the clothing should be light, and a good supply of fresh air should be admitted during the day and night. Keep up the temperature of the room to 65° or 68° F., but do not exclude the external oxygen from the body by heavy clothing.

While it is usual to attend carefully to the mouth, the nose is generally neglected. Never allow the sordes to accumulate in the posterior nares. A typhoid frequently has a tendency to pick his nose; if it is kept in a proper state of cleanliness, this source of irritation is done away with. There is as much danger and discomfort in a neglected nose as in a neglected

mouth. The plugging of the nostril causes the patient to breathe entirely through the mouth, thus increasing the tendency to fissures of the tongue and lips. Sordes in the posterior nares may produce inflammation of the throat, which may extend to the Eustachian tubes, and the unclean nose may thus be the primary cause of otitis media. Or the sordes may be carried in particles by the breathing down into the bronchial tubes and lungs, inducing irritation of these organs, which may result in bronchitis, or pneumonia of more or less septic type.

The accumulation of sordes can be readily detected by the dry, whistling breathing. Take a pledget of absorbent cotton saturated with a five per cent. solution of boric acid; press the pledget well back into the nares; do this several times to soften the sordes, then use the dull end of a hair-pin or a dull curette to remove the mass. Spray the nostrils with listerine or Seiler's solution.

In cleansing either nose or mouth great care must be taken not to cause bleeding, for the abraded mucous membrane may be a source of reinfection. In this connection it might be well to mention that in addition to the usual hygiene of the mouth it should always be cleaned after taking milk, since milk forms a particularly favorable culture-medium for bacteria, which may then be carried to the stomach, exciting indigestion and flatulence. Thompson says that a tongue-bath may often be used to advantage—that is, to hold the mouth full of fluid for several minutes at a time, when such moisture is absorbed by the mucous membrane.

Attend to the nose and mouth carefully, and you will avoid one important source of complications and add greatly to the comfort of the patient.

For the tenacious mucus give a teaspoonful of equal parts of glycerine and lemon-juice, or a teaspoonful of glycerine and borax mixture. Any alkali assists in dissolving the mucus. The same relieves the disease from the hard, tenacious mucus in pneumonia.

Whatever means are employed for bringing down a temperature, let the patient regard the process with pleasure, and not with dread.

In private practice sponging and the pack are chiefly relied upon. Endeavor to be an artist in sponging. Know *why* you sponge. Remember that the primary object is not the sudden reduction of temperature, but the indirect control of it by the soothing of the nerve-centres. However limited the time for giving a sponge, never appear to be in a hurry. Have everything in readiness before removing the night-dress. Make long, firm, straight, downward strokes, paying particular attention to the large blood-vessels and to the spine. If you have half an

hour to spend on the sponge, put twenty minutes of the time on the inner sides of the limbs and down the back. Let your touch be gentle, firm, and soothing. Never allow your patient to shrink from the sponge. With the average man, and especially woman, there is an intense dislike to the shock of cold water. But if you wish to give a cold sponge and he shrinks at the first touch, take two basins, one tepid and the other cold; take the first stroke of tepid; that will prepare him for the second stroke of cold. The same principle applies to the wet pack. Apply the sheet wrung out of warm water and gradually reduce its temperature by sprinkling with cold water. Avoid all resistance. Do not allow your patient to use his strength when you can save it. Let the sponge or pack be a rest, not an exertion. If the delirium is violent and the nervous symptoms very marked, the hot sponge is at times more beneficial than the tepid or cold. Go over the whole body, keeping up the temperature of the water from a supply pitcher. Give the back the last attention, and before sponging it put on a slip night-dress opening down the back. Then take the long strokes down the spine as hot as the patient can bear, and in ten or fifteen minutes he may drop to sleep under your hands. Should you gain that object, gently arrange the night-dress and bed-clothing, and be careful not to disturb him. In general neuritis, which is not an uncommon complication, it may be necessary to suspend the sponging for a time, or the body may be gone over in *pats* rather than strokes, drying off in the same manner. When handling a limb in neuritis make pressure with the hand upward towards the trunk, as the downward traction stretches the inflamed nerve and causes more intense pain.

In delirium a feather pillow should not be used. If you cannot afford a water pillow, a three-quart rubber bottle filled one-third with tepid water and the air excluded, makes a very good substitute. A hair pillow is cooler than one made of feathers.

Never scold a typhoid patient. Speak firmly but gently; agree and sympathize with illusions rather than argue. Notice carefully if the patient is worrying and find out the cause. He may dislike a water pillow; if so, do not use it. A picture, a wall paper, or a curtain pattern may be bothering him and he cannot tell you, or it may be a colored screen, a colored pincushion, or a perforated cane chair that may be causing him annoyance; all bright colors and patterned things should be kept out of a typhoid's sight. You cannot nurse by rule in typhoid fever, as no two cases run exactly alike, and it develops more idiosyncrasies than any other disease.

When tympanites is present and applications are ordered great care should be exercised in their use. All applications,

hot or cold, should be made of a sufficient size to cover the crests of the ilia, as the bony prominences then help to bear the weight of the poultice, stupe, or ice-coil. In using an ice-coil place a piece of flannel between the coil and the skin, and keep the whole in place by a binder fastened down the centre with a perforation on either side to allow the ends of the coil through. The patient can then be turned from side to side, thus preventing hypostatic pneumonia, bed-sores, and all other inconveniences and dangers of the one position, without displacing the coil. Let your poultice be hot, light, well-beaten, and spread not more than one-half inch in thickness. That may also be kept in place with a binder. In using turpentine on either stupe or poultice it is better to lightly vaseline the whole surface of the part before making the first application. The skin is then much more tolerant of heat and does not blister or redden quickly. An ice-coil is much better for cold application than an ice-bag on account of its light weight and the little difficulty of keeping an even temperature. If an ice-bag is used, suspend it from a cradle and do not allow its full weight to rest on the abdomen in either tympanites or hemorrhage. To reduce tympanites an enema of soapy water, one pint; glycerine, four ounces; spirits of turpentine, one dram, given slowly and low down, produces increased peristaltic action and expulsion of feces and gas. Or the abdomen may be gently massaged twice a day, the course of the colon being followed from the right groin, with olive oil, one ounce; spirits of turpentine, one dram. The enema must not be "suddy," as too much soap causes irritation and tenesmus. Only add sufficient soap to make the water a milky color. If the distention is great, be careful to relieve the weight of the bedclothes by a cradle. One can be readily made from a barrel-hoop cut in two and crossed.

Hemorrhage is, with the exception of perforation, the most dangerous and the most alarming of the accidents of typhoid fever and calls for the greatest skill and good judgment on the part of the nurse. Here absolute physical rest must be rigidly enforced. Although it is the custom to raise the foot of the bed on the first indication of hemorrhage, I think it is a proceeding that may bear some discussion. We raise the foot of the bed in collapse, heart-failure, and syncope to stimulate the circulation by sending more blood to the heart and brain. But the intestinal organs are situated so near the centre of circulation that in strengthening the circulation the amount of blood at the point of hemorrhage may be increased instead of decreased. In my opinion it is better not to elevate the foot of the bed till the *pulse* gives the indication. Apply cold by means of the coil or ice-bag already referred to, and if ice be inserted into the rectum, make the pieces conical in shape by dipping in hot

water. Not even in private nursing should a bed be changed after hemorrhage without the sanction of the physician, and then the greatest care should be exercised. To keep a patient lying on his back in soiled linen for twenty-four hours may encourage hypostatic pneumonia and a bed-sore, but neither of these complications is necessarily fatal, while arterial hemorrhage is of the greatest possible danger. In changing the bed-linen have two assistants, and on no account turn the patient from side to side. Sew the edge of the clean draw-sheet to the edge of the soiled one. Arrange the clean sheet in the usual manner. Instruct one assistant to place hands beneath the buttocks, putting both hands in from one side, and the second assistant to place hands under the shoulders and back. Have the patient gently raised or eased off the bed while the clean draw-sheet is pulled through. In this way the patient is caused little disturbance. From the first appearance of hemorrhage it is well to be prepared for future escape by packing a good quantity of cotton wool and absorbent cotton in and about the buttocks, thus saving much soiling of the linen.

Sudden collapse or heart-failure in typhoid fever may be called an emergency, and as such the nurse must be prepared to meet it. The heart-action may not respond to the applied heat and elevation of the lower extremities. It is best to rely upon the hypodermic for heart and respiratory stimulants, and not to give them by the mouth, for the stomach refuses to absorb, and the effort of vomiting tends to waste the flickering strength of the patient. Strychnine and brandy may be called the standard heart stimulants, but from one-eighth of a grain of morphine and one hundred and fiftieth of a grain of atropine, given hypodermically, we get three results—we quiet the patient, slow the heart-action, and stimulate the vasomotor system. You will know in ten minutes' time if the result is satisfactory. There is less danger of a recurrence of the collapse if the patient is ra'lied gradually, so it is better to repeat whatever stimulants are employed rather than to give the larger dose at one time.

Phlebitis may occur in any stage of the disease. When a pain of a severe or aching character is complained of in the limbs, it is well to suspect phlebitis and act accordingly. Remember, there is as great a danger of dislodging the clot while it is forming as when it is already formed; under no circumstances, therefore, should you massage the part, but at once elevate the limb, apply dry or moist heat, and let the application be kept in position by a "many-tailed" bandage, not a roller, as the latter necessitates too much disturbance.

Of perforation little can be said, except to guard against this most fatal of all accidents of typhoid fever. Perhaps the best

safeguard is a strict attention to and careful watching of the diet.

IMPORTANCE OF DIET.

Osler says that pure milk should never be given. Always dilute with water, lime-water, or aerated water. The stools of a patient on strict milk diet should be examined with great care to see if the milk is entirely digested. When masses of curds are found in the stools, vary the diet with broth or beef-juice. If there is a tendency to constipation, do not give lime-water, but dilute the milk with Vichy water, soda water, or apollinaris.

In diarrhea omit aerated waters and give lime-water in the proportion of one part of lime-water to three of milk, but in this be guided by the character of the stools. When the diarrhea is profuse and the milk undigested, it is well to follow a regular table of diet. Peptonized milk and barley-water may be given in equal parts, one ounce of each every two hours, or oatmeal-water may be substituted for the barley-water and is frequently more grateful to the patient, although the quantity of nourishment must be thus restricted; water should be very freely given in order to compensate for the quantity of fluid withdrawn from the tissues by the profuse secretion of the bowels. Watch the diet carefully when there is an inclination to vomit. Give nourishment in small quantities, very hot or very cold, whichever is more agreeable. A teaspoonful of frozen peptonized milk or a teaspoonful of hot milk or coffee may remain on the stomach when all other diets are rejected. If the patient is in a condition to express a preference for any particular form of allowable diet, it is always well to make the experiment of humoring him, as frequently the food desired is what will be retained. If the vomiting be persistent, notice the condition of the eyes, the teeth, and the ears. Intolerance of light, where there is already defective vision, an ulcerated tooth, or an ear plugged with wax may cause reflex vomiting, or it may be caused by some nerve irritation which cannot be located.

In the first and second weeks of typhoid it may not be necessary to awaken a patient for nourishment, but in the third and fourth weeks, as the strength goes down, care must be taken to increase the quantity of nourishment, and judgment may be exercised in awakening him. If he is sleeping quietly and the pulse is regular and not varying in character, let him sleep on for some hours, giving a little more than the ordinary quantity of nourishment when he awakes. But if the pulse is very weak or shows irregularity, it might be well to arouse him for nourishment and stimulants. In arousing a patient it is perhaps better to do so by speaking rather than by placing

your hand upon him. The sound of a voice he is accustomed to is less apt to startle him than the touch of a hand. We cannot emphasize the fact too strongly that the diet of a typhoid patient should never be left within his reach. There is no greater waste of strength than allowing a patient to reach out and help himself.

To bring your patient successfully through the febrile stage of typhoid fever is but one-half the battle. We might almost call the long, slow convalescence a disease in itself. Generally speaking, in the febrile stage we have the accidents to guard against, and in the convalescent stage the complications. With the decline in temperature we get the heavy sweats and great muscular wasting. There is the sub-normal temperature, weak heart-action, and frequently an impaired mental condition. To prevent chill, to build up the tissues, and to give the patient cheerful hygienic surroundings should be our effort in convalescence. With the first sweat change the clothing from cotton to flannel; protect the chest with a light layer of wool or fold of flannel. Sponging for the reduction of temperature is no longer a necessity, but there is the morbid condition of the skin to deal with, indicated by the profuse sweats and sometimes severe desquamation. During the sweat, dry the patient off under the clothing. When it is over, give him a quick, warm alcohol rub and put on dry, warm clothing. Give him the soap-and-water bath at night and a salt-and-water sponge in the morning. The salt has a general tonic effect, and on that account is better administered in the morning than at night. When severe desquamation is met with the salt and alcohol must be omitted, but cocoa-butter or olive oil may be well rubbed in at night over the whole body and a thorough bath given in the morning, using castile soap and a little borax in the water. By giving the skin careful hygienic treatment we tend to reduce the waste of tissue, assist desquamation, overcome the susceptibility to cold, and add greatly to the comfort of the patient, both physical and mental. To keep the convalescent free from excitement and give him cheerful surroundings will materially benefit his mental condition.

It is a wise plan to move the patient as soon as possible from the room in which he has spent the febrile stage of the disease, and when he is sufficiently strong to allow him to spend the morning in one room and the afternoon in another with a different exposure, getting the benefit of the sun in both.

In this paper I have not attempted to cover the whole field of nursing in typhoid, but only to touch upon some points which I have found by experience to be of much importance, and which are not always sufficiently brought out in our text-books or lectures.—Published also in the *American Journal of Nursing.*

ABSTRACTS OF PAPERS READ BEFORE THE ONTARIO MEDICAL ASSOCIATION JUNE 15th AND 16th.

Influence of Heredity Upon Life Expectancy.—H. R. FRANK, Brantford.

Every unfolding organism eventually takes the form of the order from which it sprang. This principle is the keystone of life assurance: for it is the basis of all mortality tables. Of great importance in considering a risk are the habits and environments of the applicant, for next to heredity, these play the most important part towards longevity.

A man stands, not as the counterpart of his father or mother, but as the accumulated influences of generations, which may modify many hereditary taints. Nevertheless, a child physically like the mother, say, is prone to exhibit the same diseases as the mother.

There is often a reticence among the laity in admitting a tubercular taint. Relatives said to have died of pleurisy, pneumonia, bronchitis, etc., will be found, on closer examination, to have suffered from a cough for some months previously. There is no valid reason why a person cured of incipient phthisis should be absolutely refused a policy.

Insanity clings to succeeding generations with great tenacity. We frequently see in grandchildren outcroppings of epilepsy, hysteria and other nervous manifestations.

Epilepsy is undoubtedly a disease of marked hereditary teudency, the mother's influence in transmission being more potent than the father's.

When both father and mother have died of cancer, the applicant cannot be accepted: if only one parent he may, after his 35th year receive a policy.

Asthma, rheumatism, heart trouble, hay fever and diabetes, seem to have a direct hereditary influence on the risk.

Alcoholism and a tendency to suicide also "run in families"

Life Expectancy in Morbid Conditions of the Respiratory System.—EDWARD RYAN, Kingston.

Heredity plays a most important part in respiratory diseases. Parental intoxication is capable of affecting the germ cells, if not directly, certainly indirectly. The mortality in those of consumptive history is fully 10 per cent. greater than in those whose ancestory is non-tuberculous. But of late years it is recognized that a bad family history may be largely neutralized by a good personal record, the chief indication being the weight, those under the average being more liable to tuberculosis than those over weight. Persons with robust and well developed bodies have little susceptibility to consumption, and their fine physique may outweigh the unfavorable family record.

The applicant's occupation is of the utmost importance. Hoarseness must be regarded with suspicion. Asthmatics, with a hereditary tendency to tubercle, cannot be accepted, nor are they insurable over 45 years of age. Emphysema is also a bar to insurance, as well as repeated attacks of pneumonia. Pleurisy and bronchitis demand the greatest caution.

Life Expectancy in Morbid Conditions of the Genito-Urinary System.—F. LEM. GRASETT, Toronto.

About 11 per cent. of the total deaths in the Mutual Life of New York during the last fifty-six years were due to genito-urinary diseases, chiefly Bright's disease and prostatic disease. The influence of syphilis upon life assurance is not yet thoroughly understood. Some companies reject entirely a man who has suffered from this infection. Indeed medical authorities are still divided upon the subject of its curability, Récord, the great French authority, holding that "syphilis recognized is half cured," while Gowers thinks that "there is no evidence that the disease is or ever has been cured."

In the majority of cases the tertiary lesions appear within a few years, 50 per cent. in six years, and 75 per cent. in ten years. Therefore, if a syphilitic has had efficient treatment and a period of not less than five years has elapsed since all symptoms disappeared, he might be accepted, endowment assurance to be preferred. Taking all ages of those who have had syphilis, the mortality is one-third more than the average.

The Nervous System in Relation to Life Assurance.—H. C. SCADDING, Toronto.

In the Canada Life, during the last four years, 221 deaths in all (17 per cent. of the total) were from diseases of the nervous system. Of these apoplexy claimed 10 per cent. and cerebral softening 3 per cent.

Medical selection is usually felt for a period of five years, but apoplexy and allied affections give little evidence of being influenced by a doctor's examination, for nearly as many die of these diseases during the first year of admission as at any subsequent period. Perhaps the remote family history has a greater bearing on the outlook, as regards the nervous system, than it has upon any of the other important systems. With heredity as the primary predisposing factor to be considered in nervous diseases, alcohol is a good second, and syphilis next in order.

The reflexes are most important, while in doubtful cases the ophthalmoscope should be used. The presence of the arcus senilus should always be noted, though not *per se* of much prognostic value. Inquire closely into headaches and tremor, for they often show a morbid condition beneath.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, H. J. HAMILTON, C. J. COPP AND F. A. CLARKSON.

Etiology of Cancer.

It is an excellent thing to sit down quietly once in a while and consider what progress we have made ourselves, and what has been added, during a given period, to the sum total of human knowledge. Perhaps no other subject has had, during the past year, as much hard work given to it as cancer and sarcoma. In laboratories lavishly endowed some of the brightest intellects in the world have been striving to find a cause for malignant growths. Their labor has not been as fruitful as we could wish, but still some of the outer ramparts have been stormed.

In the first place, it is the unanimous opinion of pathologists that such terms as "innocent" and "malignant" are entirely clinical. Microscopically it is not always possible to decide whether a tumor is benign or not. Indeed, Mr. Cathcart, of Edinburgh, and Dr. Cullen, of Baltimore, can show a series of tumors with an easy gradation from the typically innocent to the undoubtedly malignant. There is an essential similarity between benign tumors and cancer, the tendency to malignancy varying inversely with the degree of organization of the tissue.

The camp of investigators is still about evenly divided on the question of parasites. No sufficient proof has been forthcoming to convince pathologists that either protozva or the vegetable structures sometimes found in the cells of cancer are the ultimate cause of carcinoma.

The most important observations of the last year were those of Prof. Farmer, of Oxford, and his co-workers, who noted that cancer and sarmoca cells were like sexual cells in many ways. The normal cell of man contains 32 chromosomes, but there are other cells in the body which undergo a reduction mitosis, so that the chromosomes are reduced to 16. These are the reproductive or sexual elements, and are found, of course, only in the generative organs. The sexual cells can reproduce others containing 16 chromosomes, or they can join with another sexual cell of the opposite sex and by their union form a cell with 32 chromosomes—the ordinary tissue cell.

Prof. Farmer found that although many of the cells of a tumor were perfectly normal in their mitosis, there were other cells in every malignant growth which resembled the sexual

elements in having only 16 chromosomes. These have been called provisionally "gametoid." The inference is that the starting point consists in the development of these gametoid or sexual cells, normally found only in the reproductive tissues, and that, by fusion, they start into existence a newly fertilized race of cells. Whether this is caused by chemical changes or by a parasite is a riddle still to be solved.

Although this discovery does not seem very much, and is practically all that has been made during the past year, yet we may hope that it will prove the foundation stone of greater progress. F. A. C.

Falling of the Hair.

McDonnell (*Jour. Amer. Med.*) considers fully this important subject, which is usually abandoned to the charlatan. The most common cause of premature baldness is seborrhœa and the resulting eczema—parasitic in origin and therefore communicable. Literary people, exposed to artificial light, suffer from the heat rays, and those who work with electric burners seem to be more prone to baldness, perhaps on account of something analogous to the X-rays. Hair dyes and so-called tonics claim their share of falling hair. The practice of saturating the hair with water frequently is a damaging one. On the other hand many people do not cleanse the scalp often enough. Other reasons for baldness are stiff hats, heredity, improper hygiene, and certain febrile diseases, as typhoid, scarlet fever and pneumonia. It is a curious fact that consumptives usually have thick hair, and that the beard often develops early, giving rise to the saying, "Early development of the beard is early decay of the body."

The cure of alopecia lies in removing the cause. If this be dandruff, the scalp must be brushed clean, shampooed, and then rubbed with an ointment of salicylic acid (1) and sulphur (2½) in cold cream (25). To counterbalance hereditary predisposition, some of the ordinary rubefacients should be daily used, such as: Resorcin, 5 parts; Tr. capsici, 15 parts; olei ricini, 10 parts, and alcohol, 100 parts.

In fevers, McDonnell would not cut the hair of female patients. F. A. C.

Early Stages of Tubercle Bacillus.

Klebs, in *Die Kansale Therapie*, has made a remarkable contribution to the study of tuberculosis, which, if confirmed, will mean a revolution in our diagnosis of this disease. Very often, in microscopical examination of lymph glands, lesions from the skin, etc., we are absolutely certain of the tuberculous nature

of the tissue, but the bacillus cannot be found. Klebs insists that only the fully developed bacteria contain fat, and these alone are stained by the usual methods. All the younger forms escape the action of the dye. He claims to have succeeded in growing and in staining these previously unseen generations, and to have seen the droplets of fat gradually form. His researches will throw some light on the apparent sterility of a pleural effusion or the contents of a psoas abscess.

F. A. C.

SURGERY.

IN CHARGE OF EDMUND E. KING, GEORGE A. BINGHAM, C. B. SHUTTLEWORTH AND F. W. MARLOW.

Symposium on Syphilis.

A symposium on the subject of syphilis appeared in a special number of *The Practitioner*, (London) for July. Various well known authorities were invited to contribute articles dealing with various phases of the disease, with the result that much valuable information has been secured, especially with regard to some vexed points in the treatment of syphillis.

In view of the gravity of the disease, affecting as it does not only the individual but also the state, a brief review of the papers published in *The Practitioner* will be of interest.

Syphilis has, no doubt, existed from very early times, but much confusion existed among early writers, by whom individual diseases, such as soft chancre, gonorrhœa and syphilis were ill-distinguished. The separation of the group of venereal diseases is the work of quite modern observers. The teaching of Ricord, in France, placed syphilis on a scientific basis, and this knowledge was extended and diffused by Diday and Fournier and many other competent observers until the subject now occupies a large province of pathology. At the present day syphilis is a less fearful malady then it once was; no epidemics now occur and its more serious manifestations are comparatively seldom seen. This is due to two factors; in the first place, because the disease is better understood and earlier treatment is the rule; on the other hand, as the disease becomes more widely spread, the general resistance of the race is increased by an acquired immunity.

During the last few years a great advance has been made in our knowledge by the study of tertiary lesions, of latent syphilis, of vaccinal syphilis, of cerebral and spinal syphilis, of general paralysis and tabes, (the so-called parasyphilitic diseases). Fournier, chief and foremost of writers on syphilis,

proclaims the unity of general paralysis and tabes, of the dystrophies met with in late congenital syphilis in the first and second generations and of the parasyphilitic affections. Leredde believes that general paralysis and tabes are not only syphilitic in origin and nature, but that both are amenable to the same treatment. Hallopeau describes locomotor ataxia as a specific neoplastic affection of the centripetal nervous centres resulting in secondary degeneration and sclerosis of the sensory nerves.

It cannot be said that, up to the present time, we are certainly acquainted with the causative agent in syphilis. At different times, various micro-organisms have been claimed to be the exciting cause of the disease. Lustgarten's bacillus was looked upon as the most likely claimant for some time, but at the present day, however, is not believed to be the true causal agent. Jullien and De Lisle have found in the blood of syphilitics a polymorphic motile bacillus, agglutinated by the serum of syphilitic persons, but were unable to cultivate the bacillus outside the body. The fact that the lower animals have proved refactory to inoculation with syphilis has greatly retarded the investigation of the etiology of this disease. Martineau and Hammonic, in 1882, succeeded in inoculating an ape with syphilis, but, at that time, attracted little attention. Within the last two years, however, Roux and Metschnikoff have succeeded in producing an artificial immunity in apes by injecting an attenuated virus, produced by passage from one animal to the other. All efforts to produce an immunity, by injecting into man the serum of animals refractory to syphilis after inoculation with the human disease, have been unsuccessful.

Prof. F. C. Madden, F.R.C.S., Cairo, treats of syphilis as met with in Egypt. He points out that owing to the want of cleanliness and sanitation among the natives, and to a deep rooted objection, on religious grounds, to treatment by a medical man, and also to a blind faith in the sheik or holy-man to charm away disease, all combine to make syphilis in the Tropics a very formidable disease. The primary lesion, in the great majority of cases, owing to filth, becomes phagadenic and the secondary and tertiary lesions are severe, leading to great destruction of tissue, with consequent deformity. He says that tracheotomy is often imperative owing to deep ulceration of the pharynx extending to the larynx.

The treatment of syphilis by serum injection is dealt with in an article by J. Ernest Lane, F.R.C.S. Eng. He has carefully reviewed the literature of the subject, giving the results of experiments made by various observers during the last decade. It cannot be said that any degree of success has attended efforts to treat syphilis by means of a specific serum.

Animals which are immune to syphilis have been used in the hope their blood might contain substances antagonistic to the syphilitic virus; or the serum of animals first inoculated from syphilitic persons has been administered; again, serum from convalescents from syphilis has been injected into those suffering from the acute symptoms, but with indifferent results.

Two factors have militated against the production of a curative serum. The lower animals are naturally immune to lues, and further the organism causing syphilis is not definitely known. All efforts to cultivate the reputed etiological microorganism of syphilis have proved futile and the production of a potent solution of its toxines which is necessary for the manufacture of an antitoxic serum is therefore, so far, impossible. Hence, on theoretical grounds the prospects of a successful serum treatment of syphilis do not seem hopeful. Up to the present time, antibacterial serum have proved unsatisfactory and the use of antitoxic serums, excepting perhaps the antidiphtheritic serum, have been very disappointing. It is to be hoped that since it is an established fact that some of the anthropoids are subject to syphilitic infection, that we shall soon be provided with a curative serum for this disease as the results of experiments upon them.

It is conceded that there is one specific drug for the treatment of syphilis and that is mercury. Iodide of potash is most useful in resolving the newly formed tissue in the late lesions. Mercury may be given either by the mouth, the skin, or hypodermically. Each method has its advantages and its disadvantages. In English speaking countries, the drug is usually given by the mouth, either as hydrarg. cum creta, the perchloride, or the iodide. Dr. G. F. Still, F.R.C.P., in his article on syphilis in children, gives preference to the administration by the mouth in the hereditary form of the disease. The oral method has the drawback of being slower than other methods of setting up gastric or intestinal irratation and of the drug passing through the intestinal canal unabsorbed. The convenience of the method, especially in the form of pilis, which may be easily carried about and taken regularly without exciting attention, is evident. In Europe, the administration of mercury by the mouth is considered somewhat antiquated, now that more effectual methods are known. The treatment by inunction, although a somewhat dirty method, is very efficacious. The mercury enters the general circulation much more rapidly than when given by the mouth, a point of importance in many cases, The inunction method is strongly recommended by Dr. Touton, of Wiesbaden, who contributes a paper on the treatment of syphilis at that well known watering-place. Another excellent article by Dr. Lievan, of Aix-la-Chapelle,

advocates similar methods, of course combined with a "course" of waters at the spa.

The hypodermic method of treatment is syphilis has been treated by Dr. Louis Wickham (Lock Hospital, Paris). He points out that in the treatment of syphilis, the stomach should be spared as much as possible from the burden of drugs, in order to maintain that high degree of nutrition which is essential to a cure. It is unfortunate that no method has yet been devised for the administration of iodide of potash in sufficient doses by any route other than the stomach. He therefore insists on keeping the stomach in good condition ready to deal with the iodide in case of emergency. Dr. Wickham claims for the hypodermic method the following advantages: That it spares the stomach, it allows the more direct penetration of the mercury into the blood stream, it completely utilizes the dose administered and the more exact dosage rendered possible. He logically says that the dose must be proportionate to the resistance of the patient, a quantity sufficient in one case may be quite insufficient in another. He insists that the dosage should be carried to the highest point of toleration, usually evidenced by a reaction in the form of malaise and slight fever. Attention is drawn to the fact that in using any particular salt of mercury, the percentage quantity of the metal present should be considered in dosage. A graduated syringe made entirely of glass, is used, and having a platino-iridium needle, which may be sterilized by being made red hot in the flame of a spirit lamp. Hermetically sealed glass containers, (Jaboin's bulbs) are employed for the solutions to be injected. A daily injection is made preferably deep into the gluteal muscles, rather than superficially, being less irritating to the tissues, and so not so liable to cause abscess formation. The compounds of mercury recommended are the biniodide, the benzoate, and the cyanede, all rendered soluble in water by the addition to them of neutral salts. Insoluble salts of mercury are used where the patient cannot be seen every day. Either calomel, suspended in fluid vaseline, or "Grey Oil" (a mixture of mercury in sterilized lanoline and fluid vaseline) is recommended. Injections are made only every 6 or 7 days, with the assumption that gradual absorption will take place. There are drawbacks to this method, as the too rapid absorption of the drug, or should there be an intolerance on the part of the patient, it would be impossible to remove the metal after it was once introduced.

Sir Alfred Cooper, F.R.C.S. speaks highly of the Zittman Treatment in tertiary lesions which resist the usual remedies. These so-called "malignant" cases of syphilis, fortunately but

rarely seen, seem to be made worse by mercury and the iodides. which seem to increase the local reaction in gummata and ulcerative lesions and so aggravate the destruction of tissue. Here the Zittman treatment has proved remarkably successful in the hands of Mr. Cooper. The principle of the treatment is to eliminate the poison by diaphoresis and purgation, due attention being paid to the diet. The patient is kept in bed except for one hour daily, in a room the temperature of which is maintained at 80 degrees F., and large quantities of purgative decoctions are given hourly during the day time. The treatment lasts 14 days, but being omitted on the fifth and tenth days. Marvellous results are claimed in the treatment of refractory tertiary lesions.

A valuable article on Syphilitic Disease of the Brain is contributed by Dr. F. W. Mott, F.R.C.P. He regards syphilis as the most important cause of organic brain disease in adults, and the most weighty extrinsic factor in the production of insanity. The disease may manifest itself in two ways: first, it may produce lesions either of the membranes or blood vessels, or of both, giving rise to degenerative changes; also to the formation of neoplastic growths (gummata) with secondary softening. Secondly by lowering the specific vital energy of the cells of the body or of praticular organs, syphilis may give rise to the "parasyphilitic" affections, which include malformations, arrest of developement, and cachexia in early years, and such affections as tabes, dorsalis and general paralysis in later life. Considerable discussion has taken place as to whether a mild or severe attack of syphilis is most often followed by cerebral lesions. Dr. Mott regards those suffering from a mild attack of syphilis, on account of inadequate treatment, as most likely to have cerebral complications later. Of all predisposing causes of syphilitic brain disease, he claims alcoholic excess is the most important, whilst excesses of any kind, including mental strain, are also most important factors. The subject of brain syphilis is considered under the following headings:—basic meningitis, meningitis of the convexity, cerebro-spinal syphilis, arteritis and neoplastic formations, and encephalitis. The pathology, symptoms, diagnosis and prognosis of each of these is discussed in a worthy manner by this well known authority. Dr Mott recommends the combination of mercury with the iodide of potash in cerebral syphilis, but advocates inunction or injection of mercury when it is necessary to bring the patient rapidly under the influence of anti-syphilitic remedies.

The ocular manifestations of syphilis and their treatment is ably discussed by Walter H. Jessop, F.R.C.S. He treats of the various lesions of the eyes occuring in syphilis, and gives

specific directions for the treatment of each affection. He finds the inunction method of administering mercury to be the most satisfactory one.

An illustrated paper by St. Clair Thomson, F.R.C.S. reviews the subject of syphilis as met with in the upper air passages. The diagnosis and detailed treatment of the various lesions are thoroughly taken up. Mr. Thomson considers inunction the best method of treatment and for the local effect on sloughing or gangrenous ulceration of the throat, the inhalation of calomel fumes through a glass tube in which the drug is volatilized by a spirit lamp.

The July number of *The Practitioner*, from which the above abstracts were made, contains an immense amount of good material and the publishers are to be congratulated on this last addition to their series of special numbers. C. B. S.

OPHTHALMOLOGY AND OTOLOGY.

IN CHARGE OF J. T. DUNCAN, M.B., M.D., C.M.

Acute Otitis Media.

In the *Northwestern Lancet* of April 15, 1904, Parsons gives the following advice as to the treatment of this condition:

To prevent the occurrence of middle-ear troubles such nasal and pharyngeal diseases as will render liable infection of the Eustachian tube and tympanum must be attended to.

The dismissing of cases of catarrh with the statement that "everybody has it and there isn't very much to be done with it anyway," is responsible for most of the middle-ear trouble occurring after the first few years of infancy.

Hypertrophy, and degenerate conditions of the pharyngeal lymphoid structures, shou'd receive proper treatment. If we remove the adenoids and degenerated tonsils, we have removed a great predisposing cause. If we relieve the catarrhal conditions of the nose and nasopharynx, and keep the mucous surface clean with alkaline antiseptic douches, we will have little infectious material enter the Eustachian tube. Douching must be done carefully, and blowing the nose should be done with caution. Digging away at the external canal to remove cerumen should be prohibited. (This last remark might be listened to with advantage by some physicians.)

A diagnosis of otitis media having been made, our treatment should be governed by the pathological conditions present. A free movement of the bowels is desirable. In the earliest stages congestion may be lessened, and secretion diminished, by the

administration of 1-500 grain each of atropine and aconitine, given hourly until their physiological effect has been produced, and thereafter as often as may be necessary to keep up the effect as long as desired. Chloroform vapor may be poured into the ear for the relief of the pain. Application of a 10 per cent. solution of cocaine and adrenalin solution to the drumhead is often efficacious; also dry heat from a hot salt-bag. Inflation of the tympanum with the vapor of menthol and camphor helps the pain both by the local action of the drugs and the equalization of the air-pressure. The drumhead should be inspected to note if there is any accumulation of secretions behind it. If this is the case, or if the drumhead is sclerotic, and other efforts to relieve the pain have failed, free incision of the membrane is demanded. This should be done under strict antiseptic precautions both as to instruments and field of operations. If no secretion is found, the wound is left to heal, which it does readily. If secretion is present, a free enlargement of the puncture is to be made, so as to permit free drainage. If there is no pus present, the ear is to be packed loosely with sterile gauze, and a sterile dressing put on the outside. This is to be continued until healing has taken place. If pus is present, it must be treated like pus in any other part of the body. Free drainage is imperative.

Free irrigation is to be carried out. This is, of course, to be done very gently. A 1:1000 formalin or bichloride solution, used until the return flow is clean, and followed by instillation of 10 per cent. to 20 per cent. argyrol solution, has given the best results in the author's hands. The argyrol is allowed to run into the tympanum through the perforation by inclining the head, and the external canal is then packed, inserting a small wick through the opening if possible. If the secretions gum up the canal, they are easily removed by the application of peroxide. The discharge must be attended to carefully until it has ceased. To neglect it and allow it to become chronic would be a serious mistake. J. T. D.

Editorials.

WILLIAM OSLER.

In the fall of 1868 four bright boys commenced to study medicine in the Toronto School of Medicine in affiliation with the University of Toronto—Dick Zimmerman, Fred. Wright, Fred. Grasett, and Willie Osler. Of these Zimmerman and Wright are dead long since. Grasett and Osler left the University of Toronto at the end of their second year; the former going to Edinburgh, the latter to McGill University, Montreal. Grasett, after completing his course in Edinburgh, returned to Toronto, where he soon became a successful surgeon and teacher in surgery, and is now one of the senior professors of surgery in the University of Toronto.

Osler after graduating at McGill went abroad for a time, and was engaged in post-graduate work chiefly in London, Berlin, and Vienna. In 1874 he commenced his duties as Professor of Physiology in McGill University and Pathologist to the Montreal General Hospital. For twelve long years he worked early and late in the lecture room, the laboratory, the post-mortem room, and the hospital ward. He became first an expert physiologist, then an expert pathologist, then an expert physiologist, pathologist, chinician and physician (combined). His friends watched his career with great interest, and with much satisfaction mingled with some dissatisfaction. It was all very well for Osler to get a sort of distinction, but there was "no money in it." His confreres were getting rich, he was keeping poor. At the same time he was doing good work for McGill, which fortunately the friends of the latter appreciated. But even McGill didn't know what she was losing until Osler had gone.

In 1884 he went to Philadelphia and entered on his duties as Professor of Clinical Medicine in the University of Pennsylvania. In 1889 he became Professor of Medicine and Clinical Medicine in Johns Hopkins Hospital and University. In this year of grace 1904, he has become, with the approval of His Majesty King Edward, Regius Professor of Medicine in the

University of Oxford. We have referred to some of the mile-posts in Osler's wonderfully successful career. Many other honors have been literally heaped upon him by the way, all of which his frinds think are well deserved. In addition there is much which cannot be written with such a pen as the writer now holds. We can briefly but truly say, however, that he is one of those good souls whom to know is to love.

ONTARIO MEDICAL REGISTER.

We have received a copy of the new "Ontario Medical Register," which was prepared by Dr. R. A. Pyne last winter, its publication being delayed a few months on account of the great fire of April last when much of the printer's "copy" was destroyed. In the former edition of the "Register," which was published in 1898, there were 3,510 members enrolled. In the present edition there are 3,401 names, showing a decrease of 109.

There is one arithmetical statement in connection with these figures that is somewhat difficult to understand, as follows:

Names on list in last edition of "Register"....	3,510
Increase since October, 1898, deducting deaths.	211
Names in present edition.....	3,401

Why 3,510 with a net increase of 211 should give a total of 3,401 is not explained.

It appears to be definitely known that 505 members of the College practise outside Ontario. It is also stated that the present residence of 444 members is unknown. Probably a large proportion of these are dead, while a number are not now practising medicine. When we deduct the number of those practising outside Ontario and those whose residence is unknown, we should get the number who are now resident in the Province, *i.e.*, 2,452. We are told without any explanation as to where the figures come from, that there are now 2,400 legally qualified practitioners practising in Ontario, which, according to the last census giving the population of the Province as 2,206,000 would give one physician to every 919 of the inhabitants.

THE MEETING OF THE BRITISH MEDICAL ASSOCIATION.

This great Association has now a membership of over 19,000. The recent meeting in Oxford was quite up to the average in all respects. There were about 1,600 members present and in addition about 1,000 guests, including members of the families of the members. The authorities of the University placed their buildings at the disposal of the Association, and both members and guests were provided for without any crowding. In addition to the welcome extended by the University the City of Oxford, through the mayor and corporation, entertained the members at a conversazione, and in other ways displayed its interest in the meeting. We are told that the amount of work done in the various sections was unusually large and frequent extra sessions were held. The financial position of the Association is satisfactory, the excess of income over expenditure for 1903 being about $27,000.

A deputation consisting of Drs. Cameron, MacKenzie and Burnham, of Toronto, and Dr. Courtney, of Ottawa, appeared before the council at its first meeting, and invited the Association to meet in Toronto in 1906, or at some early convenient date. This invitation was favorably entertained, and it was determined to confer further with the deputation from Canada as to the most suitable date. The Council at its next meeting made the formal announcement that it would recommend the Association to accept the invitation to hold its annual meeting of 1906 in Toronto.

THE CALGARY SANATORIUM FOR CONSUMPTIVES.

We are much interested in the establishment of a sanatorium for the treatment of tuberculosis in Calgary, and hope in the interests of suffering humanity, that the efforts of Dr. Wills will be eminently successful. We know that in the past many consumptives who have moved from Ontario to Manitoba and the North-West Territories have been cured. We presume that it is now generally acknowledged that tuberculosis is a curable disease. We also know that in many cases unfortu-

nately the consumptives who have gone from the East to the West have rapidly grown worse until death came. Even conscientious physicians sometimes send away patients with advanced tuberculosis to die among strangers when they should allow them to die at home.

We are learning much about tuberculosis apart from the fact that it is sometimes curable. We appreciate the importance of the early recognition of tuberculosis. We believe that the best results are obtained in tubercular cases when the patients are treated in well conducted sanatoria where they can be kept under proper discipline and thorough supervision by expert physicians.

The exact virtues of different atmospheres are unknown, but there is no doubt that the high altitude will suit some patients while the low is better for others. The bracing dry inland air is sometimes beneficial, while the humid sea air is sometimes equally or more beneficial; much depending on the idiosyncrasies of the patients. We desire to obtain still more knowledge. We wish to ascertain comparative results in carefully conducted sanitoria, for instance in Muskoka, on the shores of Lake Superior, on the plains of the North-West, in Calgary, Banff, Kamloops and other portions of the Rockies. We in the East will look forward to the results of Dr. Wills and others in the West with increasing interest.

In presenting Dr. Wm. Osler for the degree of D. Sc. honoris causâ, at Oxford University, on July 27, Prof. Love said (in Latin):

"Among those who apply the results of modern science to the investigation of the causes and the cure of diseases, few have attained greater distinction than William Osler. By his professional teaching, first in Montreal, and afterwards in Baltimore, by his writings, which deal partly with questions of abstract science and partly with questions concerning the practice of medicine, by his skill as a physician, he has been for many years a leading exponent of the principle that the art of medicine should be based upon the most exact scientific knowledge of the day. For his work in exemplifying this principle, as well as for the merit of his contributions to science, he was

elected a Fellow of the Royal Society. In him also we welcome a representative of one of those daughter States which are the pride of the Mother Country—the Dominion of Canada—and also of that great Republic of the West whose people, bound to us by the closest ties of kinship, are also among our best friends."

Dr. T. G. Roddick, of Montreal, on whom an honorary degree was also to have been conferred, was unavoidably prevented from being present.

MEDICAL COLLEGES OF CANADA.

The Educational number of the *Journal of the American Medical Association* give statistics as to Medical Colleges in North America. The following particulars are given as to Canada. The course in each College includes four sessions, but the Toronto Medical Faculty now has a fifth year course in accordance with the requirements of the Ontario Medical College, and the McGill Faculty has a post-graduate course.

The Dominion of Canada, with a population of 5,335,055 (1900) contains nine medical colleges. Of these, four are situated in Ontario, four in the province of Quebec, two in Nova Scotia, and one in Manitoba.

London, Ontario.

Medical Department of Western University.—This school matriculates students in accordance with the requirements of the Provincial Council, and has a course of four years. Victoria Hospital and St. Joseph's Hospital supply the clinical advantages. The fees are about $90 per year and $25 extra for graduation, with $5 for each examination each year. This school has over 100 students and from 10 to 20 graduates annually. The next session runs from September to May.

Kingston, Ontario.

Queen's University.—This school had 216 students registered in its medical department during 1903-4, and graduated 42. The faculty numbers 25.

Toronto, Ontario.

University of Toronto, Medical Faculty.—All the lectures and demonstrations are given in the laboratories and lecture rooms of the University; more than two-thirds of the instruc-

tion in the third and fourth years is given in the wards and in the pathological and clinical laboratories. The faculty numbers 88. Clinical instruction is given in the Toronto General Hospital, Mercer Eye and Ear Infirmary, Burnside Lying-in Hospital, Hospital for Sick Children, and St. Michael's Hospital. Fees are: Registration (payable once), $5; each of the first four years, $100; fifth year, $50; for the degree M.B. and M.D., each $20. Number of students registered last session, 721; graduates, 96. The next session will commence Oct. 1, 1904. Trinity Medical College of Toronto was amalgamated with the university in 1903.

Ontario Medical College for Women.—This college is not empowered to grant degrees, but it qualifies students fully to take the examination in any university. The faculty numbers 35. The fee for each year is $110, exclusive of hospital and university fees. The number of undergraduates, 1903-04, was 31; graduates, 4. Twenty-first session will open Oct. 1, 1904, and continue for eight months.

Montreal, Quebec.

McGill University, Faculty of Medicine.—This college has a course of four years of nine months each. The faculty numbers 24 professors and 66 assistants, total 90. The total fees for the course are $500. Clinical instruction is given in the Montreal General Hospital, Royal Victoria Hospital, and Montreal Maternity Hospital. Students registered during session 1903-4, 415; graduates in June, 1904, 86. The seventy-third session will commence Sept. 20, 1904.

University of Bishop's College, Faculty of Medicine.—The course leading to the degree of C.M., M.D, extends over four years of nine months each. The annual fees are $100, which include all practical classes and material for the same. Clinical facilities are offered in the Montreal General Hospital, the Royal Victoria Hospital, the Western Hospital, the Hotel Dieu, and the Woman's Hospital. During the last session the students numbered 70; graduates, 10. The next session will open Sept. 15, 1904.

Quebec, P. Q.

University Laval, Faculte de Medicine.—This is the Quebec branch of Laval University medical faculty. The course consists of four years. The fees for the entire course are from $200 to $300, according to preliminary qualifications. The matriculants are about 100 annually, and the graduates about 20.

HALIFAX, NOVA SCOTIA.

Faculty of Medicine of Dalhousie University.—The course consists of four years of eight months each, and leads to the final M.D. and C.M. examination. During last session (1903-4) there were 58 students of whom 17 graduated. The faculty numbers 23, and the next session is from September to April (inclusive).

WINNIPEG, MANITOBA.

Manitoba Medical College.—This is in affiliation with the University of Manitoba, and has a faculty of 21. Winnipeg General Hospital and St. Boniface Hospital supply clinical material. The fees are $400 for the course of four years. There were 108 students in 1903-4, and 15 graduates.

TORONTO GENERAL HOSPITAL.

Toronto General Hospital statistics for July and August show:

	July	August
Patients in hospital	263	220
Patients admitted	230	250
Births	18	15
Total under treatment	511	485
Discharged	273	243
Died		16
Patients remaining in hospital (not including infants)	220	211
Accident cases	220	201

During August 247 accident cases received quick aid and treatment at the Emergency Branch of the Toronto General Hospital, 105 Bay Street, and 97 of the 259 patients discharged had undergone surgical operations, 12 of whom were operated upon for appendicitis.

Very few patients have been admitted suffering from typhoid, and the cases which are under treatment are of a very mild form and convalescing rapidly.

Deaths in August, 1904: Diarrhea, infant, 1; typhoid fever, 2; lock-jaw, 1; lead poison, 1; heart disease, 2; blood poison (girl), 1; cancer, 2; pneumonia, 1; peritonitis, 1; tuberculosis, 3; senile decay, 1.—Total, 16.

Personals.

Dr. W. S. Dakin (Tor. '02) is practising in Galt.

Dr. Fred. Fyle is spending the summer in Muskoka.

Dr. J. E. Davey (Tor. '02) is practising in Hamilton.

Dr. Herbert Hamilton goes to England in September.

Dr. J. Orlando Orr will go to England in November.

Dr. H. N. McCordie (Tor. '02) is practising in Forest.

Dr. T. B. Stevenson has commenced practice in Winnipeg.

Dr. J. S. Waser (Tor. '02) is practising in Walkerton, Ontario.

Dr. F. E. Chalmers (Tor. '04) is assisting Dr. Williams at Bracebridge.

Dr. Brefney O'Reilly spent the month of August in the Georgian Bay.

Dr. J. E. Godfrey (Tor. '02) is practising at Richard's Landing, St. Joseph's Island, Ontario.

Dr. E. Ralph Hooper has removed to his new house on Bloor Street West, near Spadina Ave.

Dr. Wallace Smuck, of Toronto, spent a portion of the summer on Presque Isle, near Brighton.

Dr. Chas. Sheard, Medical Health Officer of Toronto, returned from a trip to New York, August 15th.

Dr. Clutterbuck (Tor. '00) has returned from the west and opened an office on Carlton Street, Toronto.

Dr. J. Algernon Temple spent a portion of the summer at his residence, Degrassi Point, Lake Simcoe.

Dr. Allen Baines spent a portion of the month of August at the hotel of the Caledon Mountain Trout Company.

Dr. A. McPhedran, after a trip down the St. Lawrence, returned to Toronto and resumed practice August 25th.

Dr. J. S. A. Graham who has been on Georgian Bay for some weeks at Sir John Boyd's summer residence has returned to England.

Dr. E. V. Frederick (Tor. '03) sailed from Montreal for Europe, August 12th. He expects to remain abroad a year, in London, Paris and Berlin.

Dr. H. A. Bruce, of Toronto, returned, after a trip in Great Britain and the Continent, August 20th. He had an attack of acute appendicitis August 30th. Appendicectomy was performed August 31st. At the time of writing he is said to be recovering.

Dr. McLaurin, of the resident staff of the Toronto General Hospital, has recovered from an attack of appendicitis.

Dr. Murray McFarlane, after an extended trip to Montana and British Columbia, returned to Toronto August 20th.

Dr. Donald Armour (Tor. '94), who has been practising in London, England, for some years, has been appointed a Lecturer to the Royal College of Surgeons.

Dr. R. H. Mullin (Tor. '01) has settled in Minneapolis, where he has received a permanent appointment on the pathological staff of the university of that city.

Dr. J. S. McEachern (Trin. '97), of Elmvale, has gone to London, England, where he expects to remain a year, during which time he will devote his attention especially to surgery.

Drs. W. A. Carswell and R. W. Irving, of last year's resident staff, Toronto General Hospital, left Toronto, August 3rd, for the Western Territories, where they expect to remain for a limited time.

Dr. Geo. A. Peters, of Toronto, after spending a part of July and August in England, spent a few days at Scarboro Beach on the coast of Maine. He returned to his home and resumed practice September 1st.

Dr. E. Benson of Winnipeg, formerly a well known resident of Ontario, died in August after a paralytic stroke, aged 65. He practised in Winnipeg for about twenty-five years and was the Chief City Coroner.

Dr. Bruce Riordan, of Toronto, went to New London, Conn., where he was the guest of Mr. E. H. Fitzhugh, General Manager of the Central Vermont Railway, who took a party in his private car down to the coast for deep sea fishing.

Dr. Yin, (Tor. '03) a native of China, passed the examination for the double qualification from the College of Physicians and the College of Surgeons, England, August 14th. Dr. Yin received his preliminary education in the Anglo-Chinese College in Foo-Chow. After leaving that institution he was sent to Singapore as interpreter to the British Supreme Court. He preferred, however, to study medicine, and came to America for that purpose. He attended Ann Arbor University for two years, and then came to Toronto University, where he completed his course with high honors. Yin's many friends in the Faculty and among his own class of graduates are pleased with his success up to the present time and expect to hear more about him in the future.

Correspondence.

To the Editor of CANADIAN PRACTITIONER AND REVIEW:

DEAR SIR,—The American Medical Society for the study of alcohol and other narcotics was organized on June 8, 1904, by the union of the American Association for the study of inebriety and the Medical Temperance Association. Both of those societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and narcotics in health and disease. The first society was organized in 1870, and has published five volumes of transactions and twenty-seven yearly volumes of the *Quarterly Journal of Inebriety*, the organ of its association. The second society began in 1891, and has issued three volumes of transactions and for seven years published a *Quarterly Bulletin* containing the papers read at its meetings. The special object of the union of the two societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological, physiological and therapeutic relations. Second, to secure more accurate investigations of the disease associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so called specifics, and to secure legislation prohibiting the sale of nostrums claiming to be absolute cures containing dangerous poisons. Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which centre and spring from it are becoming more prominent and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and counsel. Public sentiment is turning to medical men for authoritative facts and conclusions to enable them to realize the causes, means of prevention and cure of this evil. This new society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally, in every town and city in the country. This interest demands concentrated efforts through the medium of a society to clear away the present confusion, educate public sentiment, and make medical men the final authority in the consideration of the remedial measure for cure and prevention. For this purpose a most urgent appeal is made to all physicians to assist in making this society the medium and authority for the scientific study of the subject.

T. D. CROTHERS, *Sec.*

Hartford, Conn., August 17th, 1904.

Book Reviews.

Progressive Medicine, Vol. II., June, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 334 pages, 47 illustrations. Per annum, in four cloth-bound volumes, $9.00; in paper binding, $6.00, carriage paid to any address. Philadelphia and New York: Lea Brothers & Co.

The second volume of this valuable quarterly contains articles on abdominal surgery, gynecology, diseases of the blood, spleen, thyroid gland and lymphatic system diathetic and metabolic diseases and ophthalmology. The principal contributors are Clark, Coley, Jackson and Stengel, whose names are a sufficient guarantee of the value of the book. This number is in every way equal to the twenty-one which have preceded it.

Epilepsy and Its Treatment. By WILLIAM P. SPRATLING, M.D. Pp. 522; $4.00. Philadelphia, New York and London: W. B. Saunders & Co. Toronto: J. A. Carveth & Co., Limited.

It will be of interest to the profession to learn that Dr. Spratling has published in a permanent form the results of his long study and experience of this disease in the Craig Colony for Epileptics at Sonyea, N.Y. (of which he has been superintendent for the last ten years), the New Jersey State Hospital and the Vanderbilt Clinic of Columbia College.

The increased attention devoted to epilepsy during the past twenty years has been rewarded by some progress, and it was necessary that this progress should be clearly and systematically brought before the profession, as Dr. Spratling has done in this valuable work. No part of the subject has been neglected, but the chief interest naturally centres in the chapters on treatment, which are excellent. The author does not claim too much; he thinks that about 5 per cent. of all cases are curable. Clinical records are given in abundance, and the book is practical in its character.

Obstetric and Gynecologic Nursing. By EDWARD P. DAVIS, A.M., M.D., Professor of Obstetrics in Jefferson Medical College. Pp. 402; $1.75. Philadelphia, New York and London: W. B. Saunders & Co. Toronto: J. A. Carveth & Co., Limited.

This is the second edition of Professor Davis' book, which is already well and favorably known. It bears marks of careful revision, and some additions have also been made. In subsequent editions we would suggest that specimens of charts may be given, together with directions for recording the height of the fundus uteri, etc.

Plain Words About Food. The Chemistry of Cooking and Cleaning. Boston: Whitcomb & Barrows.

The physician is some times asked for a book about the hygiene of a home, or absolute care of children, or about the way to bring up a baby, or about food and cooking, or some other of the many industries that centre in a home. Two such books, brief, practical and interesting, are mentioned above, and the firm which now publishes them was formed to act as a distributing centre for books of this class. So often the question of health is a question of good food, air and common sense in the home, that we know many of our readers will be glad of this information.

AMERICAN EDITION OF NOTHNAGEL'S PRACTICE.

Diseases of the Intestines and Peritoneum. By DR. HERMANN NOTHNAGEL, of Vienna. The entire volume edited, with additions, by HUMPHREY D. ROLLESTON, M.D., F.R.C.P., Physician to St. George's Hospital, London, England. Octavo volume of 1032 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co., 1904. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Cloth, $5.00 net; Half Morocco, $6.00 net.

This new volume in Saunders' American edition of "Nothnagel's Practice" is the eighth to be issued, and appearing within two months after the publication of the volume on Tuberculosis, gives evidence that the publishers intend completing the series at an early date. This, one of the most valuable volumes in the series, is by the famous clinician Dr. Hermann Nothnagel himself, and is as exhaustive as it is practical. The distinguished editor, Dr. Humphrey D. Rolleston, of London, England, has used his pen most profusely, almost every page giving generous evidence of his careful editing. The editorial additions include sections of Intestinal Sand, Sprue, Ulcerative Colitis, and Idiopathic Dilatation of the Colon. Appendicitis and Peritonitis have been given unusual space, treatment and diagnosis receiving exhaustive consideration. The section on Intussusception has been greatly enlarged by the invaluable additions of D'Arcy Power, of England, who has made this subject his own. There are twenty inserts of great merit.

An Introduction to Vertebrate Embryology Based on the Study of the Frog and the Chick. By A. M. REESE, Ph.D., Associate Professor of Histology in Syracuse University. 84 Illustrations. Price, $1.20. G. P. Putnam's Sons, New York and London. The Knickerbocker Press. Wm. Briggs, Toronto.

This volume is intended as an outline from which the student may learn the main facts of embryology. The abundant illustrations and the good letterpress make it an easy book to read.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles, by leading members of the Medical Profession throughout the world. Vol. I., 14th series. Philadelphia. J. B. Lippincott Company. Canadian Agent: Chas. Roberts, 1524 Ontario Street, Montreal.

Among the contributors to this volume are Carl Beck, Cattell, Bloodgood, Widal, Davenport, Stevens and Noble—names sufficient in themselves to guarantee that this number is fully equal to any of its predecessors. The articles are all short, clear and straight to the point, written by busy men for busy men, on all possible subjects of current interest. Extracts from some of these excellent contributions appear in the columns of this journal.

A Text-Book of Pathology. By JOSEPH MCFARLAND, M.D., Professor of Pathology and Bacteriology in the Medico Chirurgical College of Philadelphia; Pathologist to the Medico-Chirurgical Hospital, Philadelphia. Handsome octavo volume of 818 pages, with 350 illustrations, a number in colors. Philadelphia, New York, London: W. B. Saunders & Co., 1904. Cloth, $5.00 net; Sheep or Half Morocco, $6.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

This is an excellent book as regards both text and illustrations. Of the latter there are a number of beautiful ones in colors, printed directly in the text. Dr. McFarland's thirteen years' experience as a teacher of this subject, besides his extensive personal research in the laboratory, has fitted him most admirably to write a text-book on pathology, and this work is all that any one—student or practitioner—could desire. Unlike most works on pathology, the subject is treated, not from the professor's point of view, but from that of the student, the many difficult theories of the science being explained in clear, concise language.

Diseases of the Nose and Throat. By D. BRADEN KYLE, M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia; Consulting Laryngologist, Rhinologist and Otologist, St. Agnes' Hospital. Third edition, thoroughly revised and enlarged. Octavo volume of 669 pages, with 175 illustrations, and 6 chromo-lithographic plates. Philadelphia, New York, London: W. B. Saunders & Company, 1904. Cloth, $4.00 net; Sheep or Half Morocco, $5.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

In presenting to the profession the third edition of this work the general plan of the previous editions have not been materially altered. The entire book has been carefully revised and such additions have been made as were rendered necessary by recent medical progress. The most important alterations and additions have been made in the chapters on Keratosis, Epidemic Influenza, Gersuny's Paraffine Method for the correction of Nasal Deformities, and in the one on the X-Rays in the treat-

ment of Carcinoma. The etiology and treatment of Hay Fever have been partially rewritten and much enlarged, as has also the operative treatment of Deformities of the Nasal Septum. In the chapter devoted to general considerations of Mucous Membranes and Hay Fever, the author records the results of his experience in the chemistry of the saliva and nasal secretions in relation to diagnosis and treatment. The literature has been carefully reviewed, and a number of new illustrations added, thus bringing the work absolutely down to date.

The Doctor's Leisure Hour. Facts and Fancies of Interest to the Doctor and his Patient. CHARLES WELLS MOULTON, General Editor. Arranged by PORTER DAVIES, M.D. 1904. The Saalfield Publishing Co., Akron, Ohio.

This volume is written by a physician who has been in general practice for many years, and, as the author tells us, is the "product of his leisure hour." It contains much curious and entertaining literature respecting the medical profession. The witty and humorous features are combined with many pages of weighty and instructive matter. It is a very interesting book in all respects.

A Text-Book of Mechano-Therapy (MASSAGE AND MEDICAL GYMNASTICS). For Medical Students, Trained Nurses, and Medical Gymnasts. By AXEL V. GRAFSTROM, B.Sc., M.D., Attending Physician to the Gustavus Adolphus Orphanage, Jamestown, N.Y. Second edition, revised, enlarged, and entirely reset. 12mo of 200 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Cloth, $1.25 net.

The second edition of this useful little work has been entirely rewritten, reset, and very much enlarged. The author states that his object has been to present a work that would be useful as a text-book to students, trained nurses, and medical gymnasts, and as a reference book for the general practitioner, and in our opinion he has fully accomplished his purpose. It is certainly a practical and clear consideration of the subjects of massage and medical gymnastics, and it is with pleasure that we recommend it to our readers.

Materia Medica for Nursing. By EMILY A. M. STONEY, Superintendent of the Training School for Nurses in the Carney Hospital, South Boston, Mass. Beautiful 12mo. volume of 300 pages. Second edition, thoroughly revised. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Cloth, $1.50 net.

This little work on Materia Medica has proved of great value to the nursing profession, evidenced by the demand for a second edition. The statements are not only clear and definite, but the information given can be relied upon as being accurate. In

making the revision for this new second edition, the entire text shows evidence of having been gone over with the greatest care. All the new drugs which have been shown to be of actual therapeutic value have been included, their preparations, uses, and doses being clearly and fully described. A valuable feature of the work is the Appendix, containing such practical matter as Poison-Emergencies, Dose-Lists, Weights and Measure, etc., as well as a Glossary of the terms used in materia medica. There is no doubt in our minds but that this little work is the best of its kind.

Dudley's Gynecology. New (4th) Edition. A Treatise on the Principles and Practice of Gynecology. By E. C. DUDLEY, A.M., M.D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (4th) edition. Revised and enlarged. Octavo. 771 pages, with 401 illustrations, of which 50 are in colors, and 18 full-page colored plates. Cloth, $5.00 net; leather, $6.00 net; half morocco, $6.50 net.

In accordance with the original plan of the book the subjects are divided, not in the usual manner of grouping in each part all the diverse diseases of some special organ, but so far as practicable have arranged them in pathological and etiological sequence. For example, infections and inflammations are brought together so that vulvovaginitis, metritis, salpingitis, ovaritis, peritonitis, and cellulitis may be studied in the combined forms which they ordinarily assume. In like manner, tumors are treated in another part, traumatisms in another, and displacements in another. Under this plan the student has constantly before him the physiological and pathological unity of the reproductive system: on the other hand, if he considered all the diseases of each organ in a part by itself, he would find tumors, traumatisms, displacements, and other anomalies thrown in between the infections of that organ and causal or resultant infections in other parts of the pelvis, and thus might lose sight of the significance of morbid processes and the relations of those processes to one another.

The sections relating to General Diagnosis, Local Treatment, Major Operations, Drainage, Urethritis, Cystitis, Ovarian Tumors, Embryology, Malformations, and the Treatment of Salpingitis, Ovaritis, and Pelvic Peritonitis, have been subjected to special revision and to a great extent have been rewritten, with practical additions.

Not less sweeping than the revision of the text has been that of the illustrations to the exclusion of all borrowed engravings, and the introduction of more than three hundred new ones all reproduced from drawings specially made for the book; but what is more important than this, all minor and major manipulations and operations have been illustrated, to show the several

procedures as they take place step by step, each operation being set forth in a series of drawings; for example, twelve drawings describe the steps of hysteromyomectomy, and thirty-two explain perineal lacerations and the steps of perineorrhaphy. The surgical instrument catalogue element has been eliminated; all instruments, so far as practicable, being shown as they appear in actual work.

Materia Medica, Pharmacology, and Therapeutics—Inorganic Substances. By CHARLES D. F. PHILLIPS, M.D., LL.D. (Abdn. and Edin.), F.R.S. and F.R.C.S. (Edin.), Hon. Fellow Medico-Chirurgical College, Pennsylvania; member of the Academy of Medicine of America; Examiner in Materia Medica, University of Aberdeen; late Examiner in the Universities of Edinburgh and Glasgow; member of the Physiological Society of London; late Lecturer on Materia Medica and Therapeutics at the Westminster Medical School, etc., etc. Third edition. Longmans, Green & Co., 39 Paternoster Row, London, New York and Bombay 1904. Price, 21 shillings.

This book has occupied for many years a position of eminence among others of its kind. The third edition is practically a new book, with full information on such new departures as cacodizlates, glycerophosphates, radiant heat, etc. Everything in the volume bespeaks the careful and accurate observer, and the conservative, though not dogmatic, author. We eagerly await the second volume on the organic compounds.

The Man who Pleases and the Woman who Charms. By JOHN A. CONE. Third edition, revised. Cloth, 16mo.; price 75 cents, postpaid. Published by Hinds & Noble, 31-35 West 15th St., New York.

The great value of a pleasing address, tactful manners and cheery ways, in all the affairs of life, are well known. Mr. Cone's book emphasizes these things and sets forth the ways by which anyone may acquire the accomplishments which mark the cultured man. Of course the book is intended for the general reader, but the physician can profit quite as much as anyone by its perusal, for to whom is the possession of the social graces of greater import than to the physician?

Complying with a very general request from its subscribers, "Progressive Medicine" is now issued in strong paper covers. This change allows of its being sent by mail instead of express, and the publishers are thus enabled to reduce its price to $6.00 per annum, instead of $10.00. To such subscribers who prefer it bound in cloth, we have arranged to send it at $2.25 per volume ($9.00 per annum). There has been no change in its editorial management nor in its corps of contributors, and its high standard will be not only maintained but, if possible, improved.

Selections.

Acute Gastro-Enteritis in Infants.

M. Hutinel, in *La Revue des Maladies de l'enfance*, considers the following as the therapeutic indications to be met:—

1. To dry up the source of the poisons forming in the intestine.

2. To prevent the pathogenic germs from finding in the digestive canal a favorable soil for their growth—antisepsis of the intestine.

3. To restore to the organism the water it has lost.

To make the poisons disappear we must modify the diet, giving water only. This should be a mild mineral water, or ordinary water carefully boiled. It must be given in small quantities, frequently repeated. This water treatment may be continued in young infants for from 12 to 48 hours. In older children we may prolong it for several days. When, in spite of the water treatment, the vomiting continues and the general symptoms remain serious, we must have recourse to lavage of the stomach.

To eliminate the poisons already formed we employ purgatives—calomel in small doses, castor oil, or sulphate of soda. No intestinal antiseptic must be employed in acute gastro-enteritis. If used at all it must be when the infection is on the wane.

If the general symptoms continue threatening in spite of the above measures, we must use hypodermic injections of serum, which restore to the organism the water it has lost, raise the blood pressure and increase the excretion of urea. The serum is that ordinarily used (7 per 1000 of Na. Cl.). One must not inject too large quantities. When convulsions are imminent we give baths, at 38 deg., every four hours, using mustard in the baths if the choleriform phenomena predominate. Sometimes we inject subcutaneously camphorated oil or ether.

Alimentation is resumed very gradually. In infants under six months, after 12 or 24 hours of water diet, we begin with half a teaspoonful of milk, repeated in four hours if the first agree. In older children we try barley-water or rice-water, then broths and then milk.—Translated from *Gazette des Hôpitaux*, by HARLEY SMITH.

Hydrotherapy in Psychosis.

W. Alter considers hydrotherapy the best of all sedative measures. He has tried it in 79 per cent. of his patients, not only in furious excitement and acute dementia, but also in cases of profound dejection and hysteria. He employs baths

from one to six hours in duration; baths of not less than twelve hours' duration and wet packs continued from one to twelve hours. The baths are given to patients suffering from insomnia, and to the insane who have explosions and paroxysms. The emotional manifestations of hebephrenic patients are largely modified thereby. In hysterical patients the wet packs are better than the baths. In no case has the prolonged bath been abandoned because of a negative result. In several cases it has been continued for long periods, even to 8, 14 and 23 days. Arterio-sclerosis and affections of the heart are not a contra-indication to the treatment.

Hydrotherapy, properly employed, permits a greatly reduced use of sedative drugs. Alter, however, gives opium to melancholics in increasing doses, also applying the wet pack systematically, thereby hastening the effect of the drug.—Translated from *La Progrès Médical*, by HARLEY SMITH.

Mycosis Fungoides after Injury.

Riecke (*Arch. für Derm. und Syph.*, November 1903) reports a case of mycosis fungoides which dated from an injury. Soon after a fall on the back of the head, a firm elastic swelling was found on the scalp. This spread to the size of the palm, and became depressed in the centre and covered with dirty scales. Several months later similar tumors appeared on the scalp, and had a tendency to break down. Infiltration occurred in the skin of the neck and ulcerating tumors developed on the hard palate. *Post mortem* metastatic growths were found in the dura mater, kidneys, suprarenals, and retro-peritoneal glands; and these had the same histological structure as the scalp tumors.—*British Medical Journal.*

Pentosuria.

M. Bial (*Berl. klin. Woch.*, May 23rd, 1904) records an instance of pentosuria occurring in three members of one family, and discusses the subject. The first patient was supposed to be suffering from glycosuria and adiposity, and her urine was said to contain 0.3 per cent. of sugar. On examining the urine, Bial found that a strong reduction took place during boiling with Fehling's reagent; with his pentose reagent it gave a striking reaction, the green color coming out when a few drops of urine were added to 5 c.cm. of reagent and heated; the fermenting and polarizating tests for sugar were both negative; and, lastly, by means of repeated crystallization, the osazon was gained, which was found to be pentose-osazon, having a melting point of 150°, and a N value of 17.01 per cent. (Glucose-osazon has a melting point of 205°, and a N value of 15.6 per cent.) The second case was that of the

brother of the first patient. He, too, was supposed to be suffering from diabetes, and his urine had been examined in various laboratories, and found to contain from 0.1 to 0.3 per cent. sugar. His urine gave the characteristic reactions of pentose as mentioned in the first case. The third case was that of a sister of the two patients. In this case, too, the diagnosis of diabetes had been made and had disturbed the patient's peace of mind. There was no sugar in the urine, but only pentose. Bial points out that it is a serious mistake to confuse this harmless condition pentosuria with diabetes, and the general practitioner need not fear that the detection of pentose in the urine needs a complicated analysis and expensive apparatus; the spectroscope and polarimeter are not necessary; his reagent is able to determine when the reducing substance is pentose.—*British Medical Journal.*

Pyelo-nephritis Cured by Massage.

La Policlinique, April 15th, 1904, contains an account of a case of pyelo-nephritis shown to the Policlinic at Brussels by Bastin-Williams, who describes the patient as being completely cured by massage. Two days before a confinement at term she fell on her right side. Four days after the confinement her urine was observed to be thick. There had been no catheterism. Seven weeks later she came complaining of a dull pain in the right flank, with occasional exacerbations. She was passing urine without pain every two hours during the day, and twice each night. Her appetite failed, she had slight fever, and her general health had deteriorated. The urine was very thick with pus, and contained no blood. The right kidney was prolapsed, and sensibly larger than normal. When the urine from the two kidneys was separated by Luy's method it was found that two-thirds came from the left kidney and was clear, the remainder from the right kidney was purulent. About 50 grams of retained urine could be brought away by pressure on the pelvis of the right kidney. The treatment adopted consisted of daily massage of the kidney, and the administration of salol by the mouth. From the first fever disappeared, pain diminished, appetite returned, and the patient was obviously better. The pus gradually disappeared from the urine. When the patient was brought before the policlinic she was in robust health, the right kidney was still a little prolapsed and enlarged, and there was still retention of about 30 grams of clear and aseptic urine in the ureter. There were no subjective symptoms. At this time all treatment had been at an end for six months, and Bastin-Williams therefore claimed that the disease was finally cured. His explanation of the case was that traumatism had led to the microbic invasion of the pelvis of the kidney

from the blood, and that massage effected a cure by regularly emptying the retention pouch and producing the ordinary circulatory reactions.—*British Medical Journal.*

The Diagnosis of Carcinoma of the Stomach.

J. Sigel considers the means at disposal for rendering the diagnosis of gastric carcinoma certain, and states that neither the absence of free hydrochloric acid nor the presence of lactic acid, nor yet the absence of digestion leucocytosis, nor the proof of obscure hemoptyses are quite reliable signs, and even when they do point to the disease this has generally passed the very early stages when the diagnosis is of greatest importance (*Berl. klin. Woch.*, March 21st and 28th, 1904). In more recent time four methods have been suggested. The first is the tryptophan reaction, which consists of the appearance of a reddish-violet color body when the proteinochrome produced in the disintegration of albuminous compounds is treated with either chlorine or bromine. The red-violet color is said to appear in carcinoma of the stomach when the contents is gained by a "trial breakfast," and is treated with chlorine. The results obtained by various observers differ largely, and Sigel therefore tested this reaction in 15 cases of cancer of the stomach, and only in 2 cases was it distinctly positive. The second method has been introduced by Salomon, and depends on the determination of the amount of albumen in the gastric secretion. This observer found that gastric carcinomata always exude an albuminous fluid, and therefore considers that this may be made of use in diagnosis. The patient is given only fluids during the morning; from 2 p.m. the diet is fluid and free from albumen, nothing is taken during the night, and next morning the stomach is washed out with 400 c.cm. of physiological salt solution very thoroughly. The albumen is estimated by Esbach's test and the amount of nitrogen in the fluid by Kjeldahl's test. Distinct flocculent precipitation by Esbach's reagent and a value of nitrogen exceeding 25 mgr. in 100 c.cm. of the fluid speak for carcinoma of the stomach. Sigel tested this method in 20 cases, and comes to about the same results as Salomon. But just in those cases in which a differential diagnosis is most difficult the method is not to be relied upon. The cases quoted are those of benign ulcer of the stomach and malignant ulcer of the lesser curvature. The results in simple gastric ulcer vary within wide limits. However, he considers that the method should be practised, and in certain cases it may assist in clearing up a doubtful diagnosis. The third method is that of Gluzinski, and depends on the suggestion that the acid catarrh of gastric ulcer changes into a mucous catarrh either if the ulcer becomes malignant or when fibrous healing takes place.

By careful attention to the other signs, if one determines the time when the acid catarrh changes into the mucous, one can determine whether the case has gone to scarring or malignant degeneration. The stomach is washed out during fasting in the morning, later on it is again washed out after a trial breakfast; and, lastly, still on the same day, after a trial dinner. If free hydrochloric acid is absent in one of the washings, and is markedly present in the others, there is evidence that the acid catarrh is passing into the mucous. Sigel finds that at times this method may help one to a correct diagnosis, but it fails one in other cases. The great discomfort of having the stomach washed out three times in one day falls away when one considers that this test is only to be applied in cases when the diagnosis is either simple or malignant ulcer of the stomach, and since the correct decision is of so much importance to the patient that if the position is explained to him he will readily submit to the test. The fourth test is the testing for fatty acids in the urine. Rosenfeld found that in gastric ulcer and gastrectasis, with normal acidity or hyperacidity, the volatile fatty acids in the urine are much increased; in stasis of the contents of the stomach depending on pyloric scar or gastroptosis with subacidity or anacidity, the fatty acids are either little or greatly increased. Sigel has also tested the truth of this statement, and finds that one cannot base either a diagnosis or differential diagnosis on this analysis. He therefore is forced to the conclusion that none of these methods is capable of forming a certain diagnosis of sarcoma of the stomach, and one must therefore rely on the physical and other well-tried signs, and spare no pains in attempting to elicit in each case all the data on which one may be able to build up a correct diagnosis.—*British Medical Journal.*

The Action of Organic Extracts on Arterial Pressure.

Patta (Inaugural Dissertation Pavia, 1904) experimented with a number of organic extracts to determine their influence on arterial pressure, and sums his results as follows: The considerable increase in blood pressure, as produced by the extract of the suprarenal bodies, is independent of any action of the vasomotor centre; nor can it be ascribed exclusively to a peripheral constriction of blood vessels, but must be credited to a large extent to increased cardiac work. The peripheral constriction of the blood vessels is not produced by the action of the extract on the terminal filaments of the nervi vasorum. The slowing of the pulse produced by the extract depends upon an irritation of the cardiac filaments of the vagus; it is believed to be due to the action of that part of the drug, which comes

from the cortex of the organ, and which is less powerful from the standpoint of blood pressure than the medullary extract.

Thyroidin lowers blood pressure, most likely in a manner directly opposed to that started by suprarenin. Ovarin lowers blood pressure, markedly and persistently, and increases the frequency of the pulse. Both these conditions are independent of any action of the vasomotor centre. Orchidin increases arterial pressure by its influence on the vasomotor centres. Spermin Poehl has an analogous action. No difference is noted in the behavior of male and female animals when extracts of the genitali organs are injected. Cerebrin Poehl increases blood pressure and produces a slight slowing of the pulse.—*Therapeutic Review.*

The Element of Tact in Medical Practice.

It can be truly said that no profession calls for a greater display of tact than that of medicine, and yet, how many physicians are deficient in this very essential quality. Its possession even in a man of mediocre professional ability is frequently sufficient to give him a place in popular estimation far above that of his less tactful though more able colleague.

To some extent tact is a natural quality, but it can certainly be acquired and cultivated. Its possession is particularly desirable in the surgeon, who still inspires considerable fear among the laity. It is not alone what he says, but what he leaves unsaid, that impresses the mind of the patient. To the tactful man it is possible to state unpalatable facts without awakening anxiety and suspicion, and this he can do without underrating the risk of a necessary operative procedure. There are, indeed, people of such decided equanimity that they are willing, and even prefer, to know the worst; but these constitute by far the minority. The majority of patients in this nervous age must be handled in the most tactful manner. They are apt to dwell upon every word and weigh its significance. A thoughtless word may inflict the greatest amount of worry, and we well recognize the injurious effect of anxiety and worry upon the vitality.

Some patients have a way of asking leading questions in regard to the prognosis of their ailments. What they really wish is an expression of hopefulness. But this by the untactful man is frequently misinterpreted as a desire to know the true state of affairs, and the answer based upon this erroneous interpretation often produces a disagreeable mental impression which is very difficult to remove without awakening further distrust. When confronted with an unfavorable case it is best to inform the relatives and friends of the true condition, but to let the patient see at least a ray of hope. After all, the

majority of physicians when seriously ill themselves would prefer not to know the exact facts; for while there is hope there is life.

A tactful surgeon does not make any unnecessary display of surgical instruments, which however attractive they may appear to himself will needlessly alarm the patient. Fortunately an array of pathological specimens in bottles and an exhibition of skulls and crossbones are no longer considered ornaments of the physician's office, and there can be no doubt that the modern doctor is infinitely more considerate than his predecessors who depended upon these accessories, in connection with a magisterial appearance, a domineering and gruff manner, and a display of technical language, to impress their patients with their professional attainments and skill.—*International Journal of Surgery.*

Infusion in Pulmonary Tuberculosis.

Jacob, Bongart and Rosenberg (*Deut. Med. Woch.*) report experimental and clinical work with infusions in pulmonary tuberculosis. The vocal cords and epiglottis are anesthetized with a 20 per cent. solution of cocaine, following which a fine spray of 2½ per cent. solution of beta-eucaine is thrown into the trachea. A flexible stileted bougie is next introduced into the trachea, and when in place the stilet is withdrawn so that the bougie can be introduced into either bronchus. Next from 20 to 30 c.c. of a solution of 0.01 to 0.02 of tuberculin in 100 c.c. of water was introduced into the lungs by means of a syringe attached to the bougie. The tuberculin reaction is promptly produced, but as it disappears the quantity of the tuberculin is gradually increased. Patients are kept in a horizontal position, as in that way, of course, the solution is more liable to find its way to the upper portion of the lungs. The entire procedure, after a little experience, takes but a few minutes and is easily borne by the patient. Five patients were treated by this method, all in the second stage and in a depraved physical condition, yet all improved so much as to have been pronounced clinically cured. No after-effects were noted. In addition to the therapeutic aid, diagnostic value is claimed for the method, in that the tuberculin reaction occurs with but one-tenth to one-twelfth of the amount of tuberculin that is required to produce a similar reaction by the subcutaneous method. If a tuberculous process is present in some portion of the body other than the lungs, the amount of tuberculin necessary to produce reaction practically approximates that required by injection into the subcutaneous tissues.—*Cincinnati Lancet-Clinic.*